VoxBox & VoxBox Lite User Guide

For Version 7.0 VoxBox's

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Release 1.00

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Chapter 1: Introduction

1.1. Manual Audience and Contents

The *Auto Attendant and Voice Mail System Installation and Operation Manual* is intended for System Installers and Administrators, responsible for the installation, setup and programming of the units.

NOTE

Please read this manual before installation, programming and operation of the *Auto Attendant and Voice Mail System*.

The information in this manual is valid for the following devices:

- Voice Mail 128 mail boxes (VoxBox)
- Voice Mail 32 mail boxes (VoxBox Lite).

Note that the only differences between these units are:

Feature	VoxBox	VoxBox Lite
Mail boxes	128	32
Storage capacity	10 hours	5 hours
Number of ports	2 or 4	2

The term “unit” in this manual refers to both devices, unless specifically stated otherwise.

This manual contains the following:

Chapter	Heading
1	Introduction
2	System Description
3	Installation
4	DTMF Programming
5	Programming by Computer
6	VMS Programming
7	User Operating Instructions
8	Programming the In-Band Protocol
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Chapter 2: General Description

2.1. General

The Voice Mail and Automated Attendant is a small stand-alone multilingual system for organizations of sixteen and sixty-four employees (VoxBox, VoxBox Lite). The unit incorporates state of the art technology, including DSP, flash memory and SMT production.

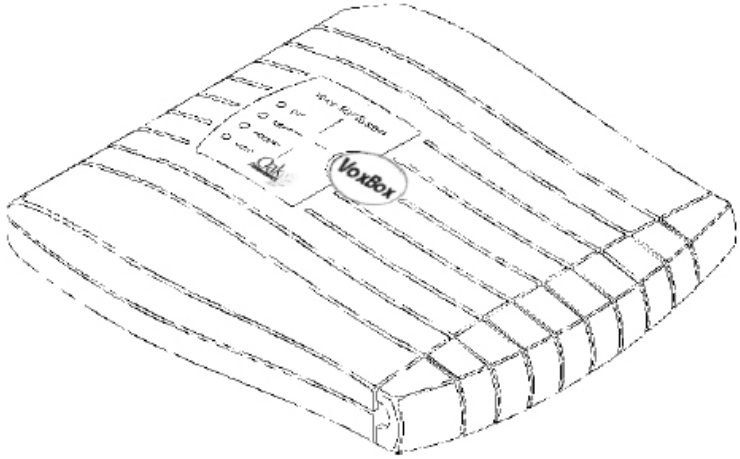


Figure 2-1: General View

The VoxBox is available with 2 or 4 ports and up to 128 mailboxes. It provides up to 10 hours of recording time.

The VoxBox Lite is available with 2 ports and up to 32 mailboxes. It provides up to 5 hours of recording time.

The unit can be integrated with most types of PBXs through the analog ports or through the RS-232 serial port.

The system administrator can be programmed by the computer using the Voice Mail System Maintenance Software Utility Program (VMS) or by touch-tone telephone.

The unit installation is quick and easy: Just mount it on a wall next to the PBX and connect it to the SLT interfaces and to the main power supply with an external power adapter.

The unit is ready for use immediately after the system administrator completes the setup procedure of integration parameters, mailboxes, notification type, system schedules and opening greetings. Mailbox owners can then set up their own personal mailbox parameters.

The unit is a powerful Voice Mail System at an affordable price. It contains most useful features and services provided by PC-based systems but at a lower cost. The unit's features can be divided into three groups:

- System administration
- Automated attendant
- Voice mail.

2.1.1. System Features

The system has the following features:

- Configuration

  The Voicemail/Auto Attendant system VoxBox is available with 2-ports and 10 hours of recording time. The system administrator can upgrade the unit by adding a 2-port expansion card to the motherboard to provide 4-ports.

  The VoxBox Lite is available with 2-ports and 5 hours of recording time only.

- Programming

  The system administrator can program the unit by:

  – Touch-tone telephone using DTMF tones

  – Computer using the Voice Mail Maintenance Software Utility Program (VMS). The installer should save the files containing the parameters set in each installation.

- Integration with your PBX

  The system administrator can integrate the unit with the PBX through:

  – In-Band DTMF Protocol integration using DTMF strings. This type of integration is achieved by setting up the communication parameters on the PBX and the units, including answering a call, transfer, recall from busy, recall from no answer, the notification parameters and more.

  – Out-band integration through a serial port (RS-232) applying the PBX parameters to the unit. This type of integration must be developed separately for each type of PBX.

- Loop Current Disconnection

  Some PBXs have the capability, which enables them to notify the unit through the line interface when a call is terminated. When the Voice Mail detects this situation, the line is disconnected and the unit is then ready to receive another call.

- Message Notification

  The unit automatically notifies the mailbox owner of new messages in different ways according to the system configuration. Notification may be local (to a PBX extension) or remote (to a telephone at a remote location, a cellular telephone or a pager).

- Security Passwords

  The unit supports three types of passwords:

  – ***System Administrator***. 4-8 digits password. Gives access to all data stored in the unit.

  – ***Operator***. 4 digits password. Gives access to the operating modes of the system. The available operating modes are: Day, Night, Break and Holiday.

  – ***Mailbox***. 4 digits password. Gives access to individual mailboxes. Mailbox owners can change the password at any time.

- Line Monitor

  The unit sends all incoming DTMF codes to the VMS from all the ports, simultaneously through the RS-232 cable. The line monitor is a powerful tool to simplify the integration and installation of the unit with the PBX.

2.1.2. Automated Attendant Features

The unit's automated attendant answers incoming calls and through a series of recorded menus and telephone directories, helps the callers reach the required extensions.

- Opening Greeting

  The unit plays a pre-recorded greeting to callers. The opening greeting usually includes the organization's name, how to reach an extension, department or operator, how to switch languages, how to leave a message and to access a directory.

  During the greeting, callers can access a department by dialing a single digit, dialing the extension number or holding for assistance.

- Operating Modes

  Depending on the time and the system schedule, the unit answers external calls with one of four opening greetings:

  – Day Mode

    During normal business hours, the unit answers calls with a pre-recorded daytime greeting. The daytime greeting enables the caller to reach a requested extension, mailbox, department, and directory or to switch languages.

- Night Mode

  During non-working hours, the unit answers calls with a pre-recorded nighttime greeting that enables the caller to leave a message in a requested mailbox.

- Holiday Mode

  During holidays, the unit answers calls with a special greeting that enables the caller to leave a message in a specific mailbox or in the operator's mailbox.

- Break Mode (Multi Breaks)

  The system administrator can program parts of the day mode as break time. During break time, the unit answers calls with a special greeting that enables the caller to leave a message in a specific mailbox or in the operator's mailbox. You can program up to 10 breaks .

- System Schedules (Auto-Mode)

  If your organization has operating hours that vary from day to day, the system administrator can define the daily operating schedules on a weekly basis, including daytime, nighttime and break time hours. When the Auto mode is activated, the unit automatically switches between the day, night and break modes according to the pre-defined schedule.

  The operator can override the pre-defined system schedule and switch manually to day, night, break, or holiday mode using a password.

- Holiday Schedules

  The unit switches automatically to Holiday mode on dates programmed as holidays. During holidays the unit answers calls with the special holiday greeting.

- Fax Detection

  If the unit detects a fax tone (CNG) during the opening greeting, it automatically transfers the call to the pre-defined fax extension.

- Directory Listing (Dial By Name)

  The unit can provide a list of mailbox owner names. The directory listing enables calls to be transferred to all extensions configured within the list. A caller can access the directory listing by following instructions during the opening greeting.

  In order to enable a directory listing call transfer, the mailbox owner must record his name and a three-letter code. A caller can reach the proper extension after dialing the respective code and verifying a correct extension according to the mailbox owner's name.

  The system administrator enables two methods of directory listing: according to the mailbox owners first or last name.

- Call Transfer

  The system administrator can program the unit to detect the Call Progress tone and DTMF signals sent by the PBX and transfer the calls to extensions in one of the following modes:

  – Non-Supervised

    The unit transfers the call immediately without verifying the status of an extension.

  – Supervised

    The unit checks for a busy or answer signal before transferring the call to an extension.

  – Semi-Supervised

    The unit only checks for a busy signal before transferring the call to an extension.

- Multilingual Option

  The unit can operate in three languages simultaneously. The system administrator can configure each mailbox to operate in one of the three selected languages. The caller can select the language in which the system messages (prompts) are played.

- Answering on the First Ring

  To avoid delays, the system administrator can set up the unit on each individual port to answer incoming calls on the first ring.

- Script Menus

  The unit supports up to 39 script menus. A script menu is a recorded announcement that can accept a digit entry (0-9) during playback. Based on the digit entered, the unit can take one of the following actions:

- Transferring the call to another script menu
- Transferring the call to another script menu and change the language
- Transferring the call to an extension or hunt group
- Transferring the call to a mailbox
- Dialing a string of DTMF (20 different strings and up to 20 digits for each string including special characters)
- Retrieving messages from a mailbox
- Disconnecting the line
- Leaving a message
- Playing the directory listing

2.1.3. Voice Mail Features

The unit enables a caller to leave a message, recorded in his own voice, in any mailbox. The mailbox owner can access his mailbox at any time from any touch-tone telephone and listen to his messages. Mailbox owners can also modify their own mailbox parameters. Up to 47 messages (new and saved) can be stored in the mailbox.

- Real/Virtual Mailboxes

  The unit supports up to 128 real and virtual mailboxes (32 for VoxBox Lite). A real mailbox has a telephone extension, whereas a virtual mailbox does not.

- Personalized Mailboxes

  Mailbox owners can personalize their mailboxes by recording a personal greeting, assigning a personal password to the mailbox and setting optional parameters.

- Personal Greeting

  Mailbox owners can record or change personal greetings at any time from any touch-tone telephone. Callers first hear the personal greeting of the extension called and then they can leave a message.

- Day and Time Stamp

  The system administrator can program the unit to indicate the start of each message and the day and time it was recorded.

- Message Deletion

  Mailbox owners can manually delete messages or the system administrator can program the unit to automatically delete all messages after a specified number of days.

- Message Forwarding

  Mailbox owners can forward copies of messages to other mailboxes or mailbox groups. Mailbox owners can also record an introduction to the forwarded message.

- Message Reply

  Mailbox owners can reply directly to a message and record a message in the sender’s mailbox.

- Pause During Message Retrieval

  Mailbox owners can pause the playback of the mailbox messages.

- Mailbox password back out key

  Mailbox owners can be routed to the Main Company Greeting from the System request to enter the mailbox’s password.

- Mailbox Groups

  A caller can send a message to all the members of a mailbox group at one time.

All defined mailboxes belong to the “All Group” mailbox group. In addition, the system administrator can create up to four mailbox groups, each containing up to twenty mailboxes. Mailboxes can belong to more than one group and can be added to or deleted from a mailbox group by the system administrator. Each mailbox group can be assigned with a mailbox group greeting.

- Do Not Disturb Mode

  Mailbox owners can set their mailboxes in the Regular Mode or Do Not Disturb Mode. When a caller dials a Do Not Disturb extension using the Automated Attendant menus, the unit plays a special “Do Not Disturb” menu and does not transfer the call to the extension.

- Individual Language Selection

  The system administrator can select one of the languages supported by the unit. When the mailbox owner or caller enters the mailbox, the unit automatically switches to the selected language.

- Adjustable Recording Length

  The system administrator can select the length of all recorded messages in the unit. The selected length will control the following types of messages: scripts, greetings, names and incoming messages. Changing this parameter will affect the operation unit.

- Automatic Gain Control (AGC)

  When this feature is enabled, the unit automatically adjusts the line volume so incoming messages will be recorded at the same level.

2.2. The Basic System Description

The unit is a digital system consisting of the following:

- Sophisticated DSP voice-processing device
- Flash memory for storing voice recording and parameter data
- Central Processing Unit
- 2- or 4-ports (VoxBox Lite 2 ports only) analog extensions line interface
- Real-time clock

The unit provides two major services:

- Automated Attendant

  Uses menus and sub-menus to transfer calls to specific departments, extensions or mailboxes.

- Voice Mail

  Receives and delivers messages. Each mailbox has its own number and mailbox owners have passwords enabling them access to their mailboxes.

Messages can be saved, deleted or transferred to other mailboxes. Mailbox owners can also send identical messages to groups of mailboxes or to all the mailboxes in the system.

By configuring the following, the unit's Automated Attendant and Voice Mail can be customized to suit the company requirements:

- PBX parameters
- Automated Attendant script menus and customized "Busy", "No Answer" and "Do Not Disturb" menus in up to three different languages simultaneously.
- Voice Mail features include: mailboxes, mailbox groups and various types of message notifications for each mailbox

The VoxBox comes with two lines and 10 hours recording time. You can upgrade the unit by adding a 2-port expansion card to the motherboard to provide four lines.

The VoxBox Lite comes with two lines and 5 hours recording time. This unit is not scalable.

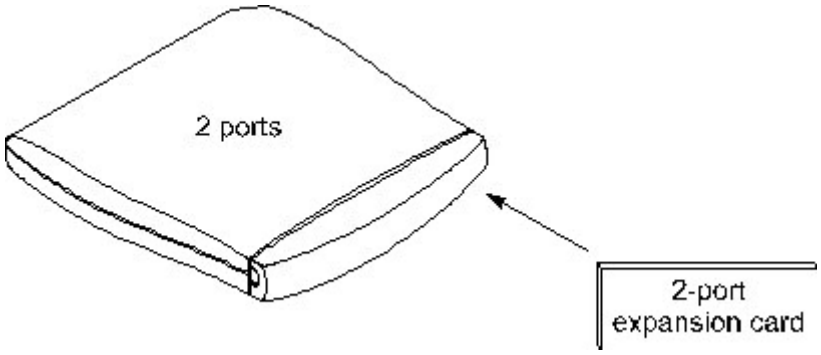


Figure 2-2: VoxBox Unit Upgrading

2.3. Physical Description

The functional components of the unit are located under the side panel cover. The LEDs are on the left side of the front panel. The bottom panel has two indented holes for wall mounting.

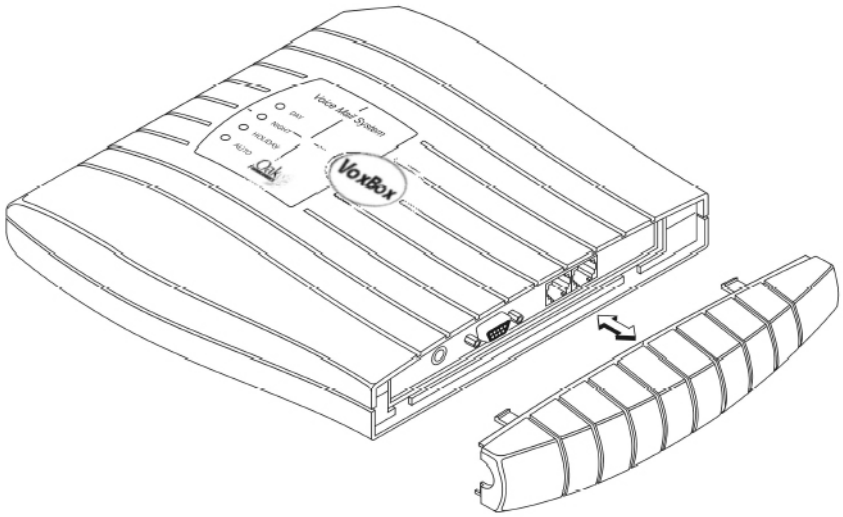


Figure 2-3: Unit With Cover Removed

2.3.1. Side Panel

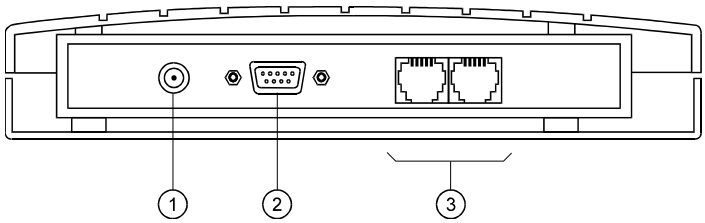


Figure 2-4: Unit Side Panel

No.	Connector	Function
1	Power Supply Connector	Connects the unit to the external power supply
2	RS-232 Connector	Connects the unit to the PBX or a PC
3	2 RJ-11 Sockets	Connects the unit to 2 or 4 PBX extensions (VoxBox), Connects the unit to 2 PBX extensions (VoxBox Lite)

2.3.2. Front Panel

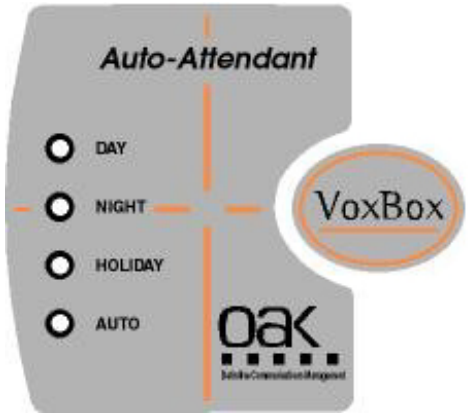


Figure 2-5: Unit Side Panel

The following table describes the function of the four LEDS on the front panel.

Status	Day	Night	Holiday	Auto
Day Mode: Manual	On	Off	Off	Off
Night Mode: Manual	Off	On	Off	Off
Holiday Mode: Manual	Off	Off	On	Off
Break Mode: Manual	On	On	Off	Off
Day Mode: Auto	On	Off	Off	On
Night Mode: Auto	Off	On	Off	On
Break Mode: Auto	On	On	Off	On
System Error[1]	Off	Flashing	Off	Off
System Error[1]	Flashing	Flashing	Flashing	Flashing
System Error[1]	Flashing	Flashing	Flashing	Off
Automatic Self-Test	On	On	On	On

[1] Please contact your local dealer.

2.4. Technical Specifications

The technical specifications of the unit are as follows:

DC Power Supply	9VDC/800mA
Line Voltage	24 to 72VDC
DC Leakage Current	> 10μA
On-hook Insulation Resistance between Line Terminal and the Ground	0 to 100VDC > 5MΩ 100 to 200VDC > 30KΩ 500 VAC/50Hz > 20KΩ 100 VAC/25Hz > 100KΩ
Ring Capacitor	0.47μF ± 10%
On-hook Impedance	@ 50VDC, 40 VAC/25Hz > 3000Ω
Ring Detect	27 to 100VAC/16 to 60Hz
DC Resistance (off-hook)	24 to 66VDC @ 20 to 100mA 100 to 350Ω
Impedance (off-hook)	300 to 3400Hz 500 to 700Ω
Imbalance Ratio	300 to 3400Hz > 46dB
Return Loss	300 to 3400Hz > 18dB
Current during Break	< 700μA
DTMF Transmission:	
Frequency Tolerance	+1.5%
Frequency Level (High Group)	-6 to -8 dBm
Frequency Level (Low Group)	-8 to -10 dBm
Inter-digit Pause in Tone Dialing	70 to 80ms
Fax CNG Tone Detection	1100Hz ± 38Hz

Chapter 3: Installation

3.1. General

The unit is delivered completely assembled. It is designed for mounting on a wall close to the PBX.

3.2. Unpacking

Before unpacking, inspect the package. If you notice any damage, immediately report it to your local dealer.

➢ **To unpack the unit:**

1. Place the package on a flat surface and open it.
2. Remove the contents of the package and place them on a clean surface.
3. Remove all packing material.
4. Inspect the contents. if you notice any physical damage, report it to you local dealer immediately.

3.3. Installing the Unit

➢ **To install the unit:**

1. Mount the unit on a wall close to the PBX cabinet. Use the drill template to place the two screws.
2. Remove the side panel cover.
3. Connect the RJ-11 connector on one end of the cables to the RJ-11 sockets on the side panel of the unit. Connect the other end of the cables to one or two analog telephone lines on the Main Distribution Frame (MDF) of the PBX (see Figure 3-1).

NOTE

Each RJ-11 socket on the side panel of the unit can support up to two analog telephone lines (VoxBox only).

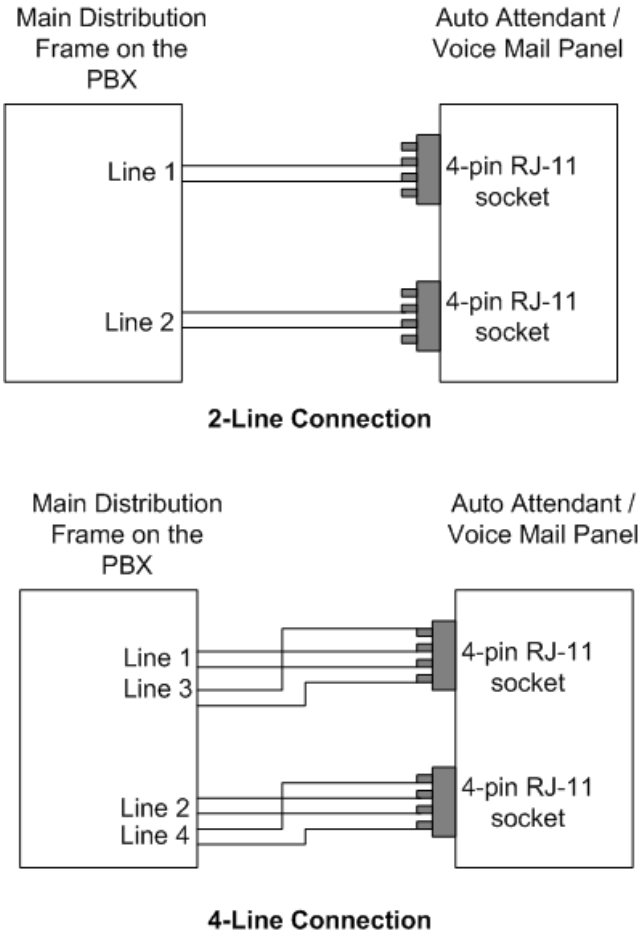


Figure 3-1: Analog Line Connections

4. On the side panel of the unit, plug the 9 VDC adapter jack into the power supply connector.
5. Plug the 9 VDC adapter into the main power supply outlet to turn the unit on. The LEDs on the front panel turn on and off, one after another and then the LED indicating the status of the unit turns on.
6. If your PBX supports a full-authorized RS-232 integration with the unit, connect one end of the RS-232 cable to the unit's RS-232 connector and the other end to the RS-232 connector of the PBX.
7. Call each unit line from any extension and verify the answer. You should hear the default greeting (system message no. 000. See Chapter 12).
8. Replace the side panel cover.
9. Program the unit according to your PBX type and required applications.

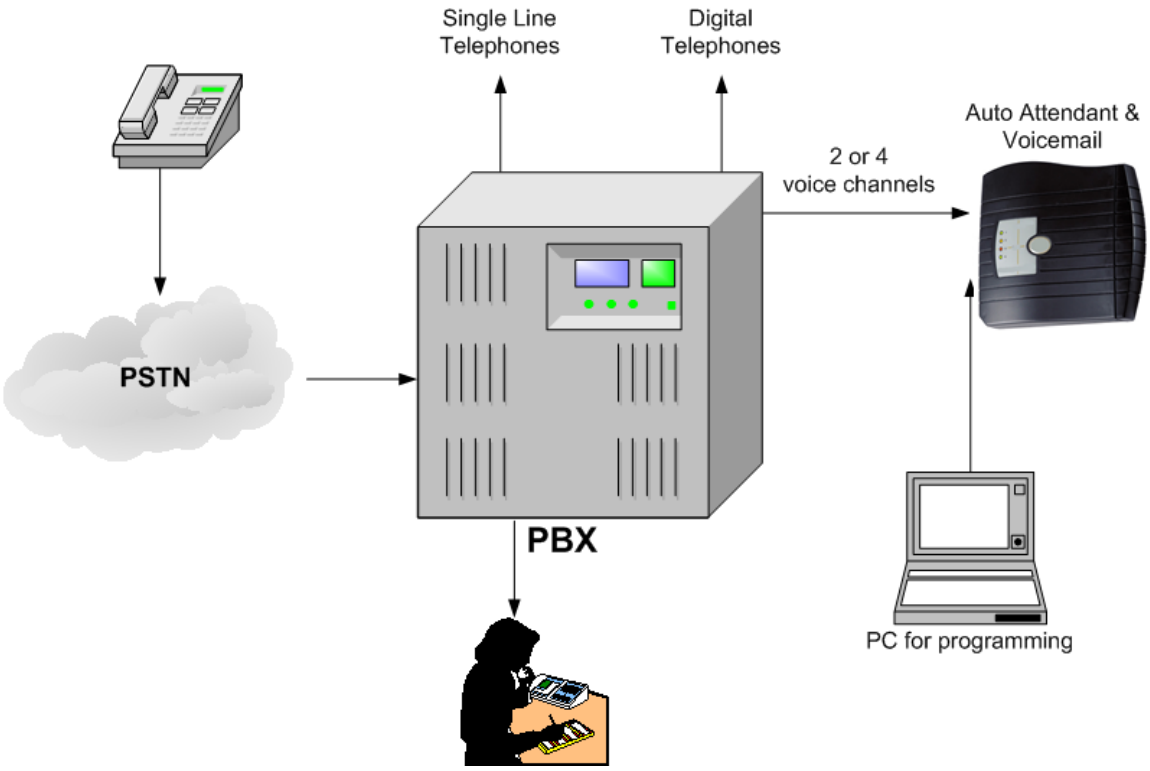


Figure 3-2: Analog Line Connections

3.3.1. Expanding the System to 4 Ports (VoxBox Only)

The 2-port expansion kit contains:

- 2-port expansion card
- 4-wire cable
- 2 plastic spacers.

➢ **To install the expansion card:**

1. Disconnect all external cables and connectors.
2. Remove the 9 VDC adapter power plug from the main power supply outlet to turn the unit off.
3. Open the unit's top cover by unscrewing the four screws.
4. Place the two plastic spacers into the corresponding holes.
5. Insert the expansion card into the corresponding J9/J10 connector.
6. Connect one end of the 4-wire cable to J5 on the motherboard and the other end to J3 on the expansion card.
7. Replace the top panel cover and plug the 9 VDC adapter into the main power supply outlet to turn the unit on.
8. Reconnect all the external cables and connectors to the unit. Voice Mail automatically detects four lines when it is turned on.

Chapter 4: DTMF Programming

4.1 General

You can program the unit using:

- A telephone – by means of DTMF tones
- A computer – by means of the designated Voice Mail Maintenance software (see Chapters 5 and 6).

NOTE
You will hear a confirmation tone every time you enter a programming command.

4.2 Entering and Exiting the Programming Mode

NOTE
The unit is unable to handle calls when in the programming mode.

➢ **To enter the programming mode:**

.1 Connect a PBX analog line to the unit.

2. Call the PBX analog line from any touch-tone telephone.
3. Wait until the unit answers and plays the opening menu.
4. Dial *900.
5. Dial the System Administrator's password (default: 1234) to enter the programming mode.

➢ **To exit the programming mode:**

Dial *900 or do not dial any number for a consecutive one minute.

NOTE
If you exit the programming mode by dialing *900, the unit plays the opening menu. You can then check the changes that were made to the system.

4.3 First Time Programming

When programming a unit for the first time, follow this checklist:

1. Call from a touch-tone telephone to the unit. You will hear the default message (system message 000 – see Chapter 12).
2. Dial *900 and the administrator password (default: 1234) to enter the programming mode.
3. Set the PBX parameters according to Paragraph 4.3.1 to ensure the proper operation of the unit with your PBX.

4. Set the unit's real-time clock according to Paragraph 0.
5. Set the system schedule according to Paragraph 4.3.3.
6. Create mailboxes according to Paragraph 4.4.1.
7. Define a notification type for each mailbox according to Paragraph 4.4.3.
8. Define notification parameters (i.e. message light on and message light off and interval between ring notification) according to Paragraph 4.4.3.3.
9. Record and program script menus for the Automated Attendant according to Paragraph 4.4.4. Make sure you define the mailboxes before building Automated Attendant script menus.

4.3.1 Defining PBX Parameters

To integrate the unit with your PBX, apply the PBX parameters to the unit. To obtain your current PBX parameters, check your PBX User's Manual or the current PBX setup configuration.

To configure the unit to detect the in-band DTMF protocol sent by your PBX, refer to Chapter 7.

NOTE

Do not forget to enter programming mode by dialing *900 and the administrators password before using the programming commands.

Table 4-1 presents the commands you must enter to apply the PBX parameters to the unit.

Table 4-1: PBX Parameter Commands

Operation	Command	Default
Extension size	***300 + X** where X is a digit 1-4 You can only change this parameter if mailboxes and/or legal extensions have not yet been defined.	3
Cut off time for continuous call progress tone detection	***301 + X** where: X = cut off time in seconds (0-9)	6 seconds
No. of rings before the line is answered	***310 + line number + number of rings** Line number = 1-4 Number of rings = 1-9	1
Time to wait for No-Answer	***311 + XX** where XX is 00-99 seconds. This code is applicable only when supervised transfer is selected.	20 seconds
Legal PBX Extensions	***320 + Y + First Ext. + Last Ext. + #** where Y is a group number (0-9). Example: *320 0 330 350 # *320 1 355 375 # You can define up to 10 groups of legal extensions. If a caller dials an extension by direct dialing (code 170), The unit checks if the extension is legal. If the extension is not legal, The unit does not transfer the call.	None
Resetting a group Resetting all groups	***320 + Y + 000 + 000 + #** (the two groups of zeros can be 2, 3, or 4 digits long, according to the extension size) ***320 + #**	
Operator ID Code	***330 + X** where X is a digit 0-9 When the caller dials this digit during any script message, the call is transferred to the operator.	0
Programmable code for retrieving messages	***331 + X** X = 0-9; Retrieve digit	9

Operation	Command	Default
Disconnection Code	***333 + CODE [1] + #** The unit terminates a call when it receives the disconnection code. The code can include up to four digits. Legal values for this code can be any combination of 0-9, *, #, and A-D.	###
Clear Disconnection Code	*** 333 + #**	
External Access Code	***340 + X + #** where X is up to 4 digits external access code (legal entries 0-9, ABCD,), Pause (*1). This code is applicable for external notification.	9
Clear External Access Code	***340 + #**	
Pause before and after external access code	***341 + X** where X is the length of the pause in seconds (0-9)	2 seconds
Transfer mode for all extensions	***350 + X + Y** X = 1; All extensions except the operator X = 2; Operator extension only Y = 0; Non Supervised Y = 1; Supervised Mode Y = 2; Semi Supervised mode	Non supervised
Day operator, Night operator, Fax and Supervisor's extension numbers	***360 + X + YYYY + #** where: X = 1; Day operator X = 2; Night operator X = 3; Fax extension X = 4; Supervisor extension *One mailbox can be defined as Supervisor. When storage memory reaches 80% of its capacity, a message is sent to this mailbox indicating the situation.* YYYY = Corresponding extension number.	 0 0 – –
Delete the extension assignments	***360 + X + #** where: X = 1; Day operator X = 2; Night operator X = 3; Fax extension X = 4; Supervisor extension	
Volume level	***369 + X** where: X = volume level (0-9); 9 = Loudest	5

Operation	Command	Default
Flash-1	***370 + XXX** where XXX is a 3-digit number (000-980) in steps of 20 ms. Example: *370 300 sets Flash-1 to 300 ms	600 ms
Flash-2	Flash-2 is fixed at 1200 ms. Flash-2 is used in some PBX's for Recall from No-Answer or Busy Codes.	1200 ms
Busy, Disconnect and DTMF Off/On time	***371 + X + YYYY** where: X = 0; incoming minimum DTMF length (0000-3000 ms)(*Note: DTMF, which is shortly that defined with this command will be ignored by VM during greetings recording process)* X = 1; busy off (0100-3000 ms) X = 2; busy on (0100-3000 ms) X = 3; Disconnect off (0100-3000 ms) X = 4; Disconnect on (0100-3000 ms) X = *; DTMF off (0000-3000 ms) X = #; DTMF on (0000-3000 ms) YYYY = Cadence in milliseconds in steps of 20 milliseconds.	100 ms 500 ms 500 ms 240 ms 240 ms 200 ms 60 ms
Length of the DTMF cadence sent by the PBX, e.g. a Disconnect code *Note:* *This parameter is needed to calculate the time, which must be truncated from the end of the message, which is terminated via the Disconnect code.*	***372 + X** where X is the length of the DTMF cadence in ms (0-9). Each step represents 100ms *Note:* *By setting this parameter to 2, the Voice Mail will cut 200 ms from the end of the recording.*	100 ms
Busy Signal Cadence Check	***375 + XXXX + #** where XXXX is a busy extension number. Check the busy signal by dialing the busy extension number and playing the busy cadence values.	

Operation	Command	Default
Voice and DTMF Sensitivity	***376 + X + Y** X = 1; Voice sensitivity level X = 2; DTMF sensitivity level Y = Sensitivity level (0-9) The volume at which the unit detects voice when the called extension answers or the volume level at which the unit detects DTMF throughout its operation. *Note: The higher the sensitivity level, the higher the sensitivity to voice or DTMF.* *In order to activate the new selection, a new call must be initiated.*	5
Automatic Gain Control (AGC)	***377 + X** X = 0; AGC disabled X = 1; AGC enabled When enabled, The unit will adjust the incoming messages volume to a set volume level. Note: For the new value to take affect, a new call must be initiated.	Enabled
DTMF amplitude	***379 + X** where X = volume level (1-9), 9 = Loudest	5
Procedural codes sent to the PBX in order to perform a specific task	***380 + X + CODE [1] + #** X = 1; LED1 notification code X = 2; LED2 notification code X = 3; LED notification off code X = 4; Transfer code X = 5; Recall from Busy X = 6; Recall from No Answer **CODE [1]** = Respective PBX code	 None None None Flash 1 + Ext Flash 1 Flash 1
Delete a specific procedural code	***380 + X + #** X = 1; LED1 notification code X = 2; LED2 notification code X = 3; LED notification off code X = 4; Transfer code X = 5; Recall from Busy X = 6; Recall from No Answer	
Define a free DTMF string, that can be dial from the Auto Attendant to the PBX	***381 + XX + YY…YY + #** X = String number (00-19) YY…YY = DTMF string *Note: See also command *121*	3.3
Answer number of samples	***386 + X** where: X = number of samples (0-9)	5

CODE [1=]

DTMF Character	Number to Dial
Digits 0-9	0-9
*	**
Extension	*0
Pause	*1, indicates a 1 second pause
Hook Flash 1	*2
Hook Flash 2	*3
#	*4
A	*5
B	*6
C	*7
D	*8

4.3.2 Setting the Time and Date

Table 4-2 presents the commands used to set the unit time and date.

NOTE
Make sure to enter programming mode by dialing *900 and the administrator's password before using the programming commands.

Table 4-2: Time and Date Commands

Operation	Command
Setting the time and day of the week	***420 + HH + MM** where HH = hour (00-23) MM = minutes (00-59) Example:*420 15 25 stands for 3:25 p.m.
Setting the date	***430 + DD + MM + YY** where DD = date of the month (01-31) MM = month (01-12) YY = year (00-99) Example:*430 15 03 97 March 15, 1997 *Note: 00 represents Year 2000.* *The day of the week is automatically calculated by the system, based on the entered date.*
Listening to the system time	***440** The system announces the date and time.

4.3.3 Programming the Operational Modes

The unit can operate in Day, Night, Break, or Holiday mode. If the unit is in the Auto mode, it automatically changes modes according to programmed schedules.

NOTE
Do not forget to enter programming mode by dialing *900 and the administrator's password before using the programming commands.

Table 4-3: Operational Modes Commands

Operation	Command
Selecting an Operational Mode	***400 + X** where X stands for the operational mode. Day mode = 0 (default mode) Night mode = 1 Holiday mode = 2 Auto mode = 3 Break mode = 4
Selecting time stamp format (Used by English and Chinese languages only)	***410 + X** where X = 0 means the time stamp is in 12-hour format (default) X = 1 means the time stamp is in 24-hour format
Setting the Working Time (for Auto mode only)	***450 + D + hh:mm + hh:mm** where D is the day of the week (1-7)[1] First hh:mm = start of work time in 24 hour format Second hh:mm = end of work time in 24 hour format Repeat for all days of the week. Example: *450 1 08 30 1700 means that the unit will play the Day mode opening greeting on Monday from 8:30 until 17:00. It will play the Night mode opening greeting the rest of the time. [1]*: Day 1 is Monday.*
Setting the Breaks Time (for Auto mode only)	***460 + X + Y + hh mm + hh mm + SS, where** **X - Day of the week 1-7, 1 for Monday** **Y – Break number 0-9** **SS – Script number** **hh mm – start and stop of break time in 24 format**

Operation	Command
Entering annual holiday dates (For Auto mode only)	***470 + DD + MM + hh:mm + hh:mm** where: DD = Day of the month (01-31) MM = month (01-12) hh:mm = Start time; Hour and minutes in 24 hour format hh:mm = End time; Hour and minutes in 24 hour format Repeat for holidays Example 1: *470 02 12 08 15 23 45 The unit will play the Holiday mode opening greeting on December 2nd, from 8:15 until 23:45.
Delete all holidays on a specific date	***470 + DD + MM #** where: DD = Day of the month (01-31) MM = month (01-12)
Delete all holidays on a specific month	***470 + ** + MM + #** MM = month (01-12)
Delete all holidays	***470 + #**
External Notification Active Time	***490 + hh:mm + hh:mm** where: hh:mm = Start time; Hour and minutes in 24 hour format hh:mm = End time; Hour and minutes in 24 hour format Example 1: *490 09 00 20 00 The will activate the External Notification between 9 a.m. to 8 p.m.

4.4 Programming the Unit

4.4.1 Creating Mailboxes

You can define up to 128 (for VoxBox) or 32 (for VoxBox Lite) mailboxes. The numbers of the mailbox and its extension are identical. Make sure that the number of digits in the mailbox number conforms to the number of digits in an extension (*300).

You can select one of the languages supported by the unit for each mailbox. After selecting a language, the unit performs the following:

- Plays all menus in the selected language.
- Plays all system messages (e.g., time stamp and error messages) in the selected language.
- If ring or remote notification is enabled, the mailbox owner is notified in the selected language.

A virtual mailbox can also be created for users who do not have extensions. When a caller dials a virtual mailbox number on the Automated Attendant menu, the call is immediately transferred to the Do Not Disturb menu and the caller is given the option to leave a message.

You may use the external notification features for the virtual mailboxes. Do not select internal notification because virtual mailboxes do not have extensions.

You can assign a mailbox for announcing messages without the ability to record incoming messages. This mailbox is called an Announcer mailbox. All mailboxes can be changed from a regular mailbox to an announcer mailbox and vice versa at any time.

NOTE

Do not forget to enter programming mode by dialing *900 and the administrator's password before using the programming commands.

Table 4-4: Mailbox Creation Commands

Operation	Command
Creating a range of mailboxes	***500 + First Mailbox + Last Mailbox + #**
Creating one mailbox	***501 + Mailbox Number + #**
Selecting an announcer mailbox	***502 + XXXX + Y + #** where: XXXX = existing mailbox number Y = 0; Regular mailbox (default) Y = 1; Announcer mailbox
Deleting a mailbox	***510 + Mailbox Number + #** Make sure to remove any transfer to the mailbox from the Automated Attendant scripts before deleting the mailbox.
Creating a range of virtual mailboxes	***520 + First Mailbox + Last Mailbox + #**
Creating one virtual mailbox	***521 + Mailbox Number + #**
Defining whether to play or skip the time and date stamp during message playback for a range of mailboxes	***530 + First Mailbox + Last Mailbox + B + #** where B = 0; Play the date and time stamp (default) B = 1; Skip the date and time stamp
Defining whether to play or skip the time and date stamp during message playback for one mailbox	***531 + Mailbox Number + B + #** where B = 0; Play the date and time stamp (default) B = 1; Skip the date and time stamp
Defining a language for a range of mailboxes	***532 + First Mailbox + Last Mailbox + Z + #** where Z = 1, 2 or 3 (language number)
Defining a language for a mailbox	***533 + Mailbox Number + Z + #** where Z = 1, 2 or 3 (language number)

4.4.2 Creating Mailbox Groups

You can create up to four mailbox groups for distributing messages. Each mailbox group can contain up to twenty mailboxes. The group numbers are by default 000, 001, 002 and 003. Group 099 consists of all mailboxes (real and virtual).

You can select a different number for the first digit of the mailbox groups using code *545. Make sure that you select a number that does not interfere with your PBX's numbering plan.

NOTE
Do not forget to enter programming mode by dialing *900 and the administrator's password before using the programming commands.

Table 4-5: Mailbox Creation Commands

OPERATION	COMMAND
Adding a mailbox to a group	***540 + Group Number + Mailbox Number + #** **Note:** You must define the mailbox before adding it to a group.
Changing the number of the first digit in the mailbox groups	***545 + X** where X is the first digit of the mailbox groups. Default is 0.
Deleting a mailbox from a group	***550 + Group Number + Mailbox Number + #**
Resetting a group	***560 + Group Number** **Note:** Resetting a group removes all the mailboxes within that group.

NOTE
You can record a separate greeting message can be recorded for each mailbox group.

4.4.3 Notification

The unit notifies the mailbox owner of new messages in different ways according to the system configuration. Notification may be local or remote.

NOTE
Notification is always done on the second line.

4.4.3.1 Local Notification

For local notification, you can select one of the following options:

- ***None***. The notification feature is disabled.
- ***Message Light On 1***. The unit signals the PBX that a mailbox has received a message. The PBX then turns on the message light of the telephone extension. If the Message Light Off code is programmed, the code is transferred to the PBX after the mailbox owner retrieves all his new messages.
- Some PBXs do not support the Message Light Off code. Instead they turn the message light off when the mailbox owner presses the message button on his proprietary telephone set and the unit starts playing the messages (see Table 4-1).
- ***Message Light On 2***. Same as Message Light On 1 but used only for PBXs that have two different codes for different telephones or for special tone notification (see Table 4-1).

The system administrator can set the notification method to one of two states (code *760):

- Notification on first new message
- Notification on every new message
- ***Sign Rings***. The unit rings the notified extension number. These Sign Rings may be sent at programmed intervals (code *720). The unit stops sending Sign Rings after the mailbox owner retrieves all his new messages or the maximum number of retries has been made (code *750).
- ***Rings***. The unit rings the notified extension for a programmed time period (code *730). When the mailbox owner answers, the unit prompts him to enter his password. After entering the password, the mailbox owner may retrieve his messages. If the mailbox owner does not answer, the unit tries again at programmed intervals (code *720). The unit stops sending Ring notifications after the mailbox owner retrieves all his new messages or the maximum number of retries has been made (code *750).

4.4.3.2 Remote Notification

The mailbox owner may choose to be notified at a remote location (i.e. his mobile telephone, home telephone or pager) by entering a remote telephone number (of up to 20 digits) or pager number (of up to 40 digits). You can use any combination of *, #, A-D, 0-9, and Pause when setting the remote notification telephone number.

After remote notification is enabled, the unit will dial the remote phone or pager number and notify the mailbox owner of any new messages. After entering the password, the mailbox owner can retrieve his messages. The duration of remote notification rings is programmed using code *730.

The unit stops sending Ring notifications after the mailbox owner retrieves all his new messages or the maximum number of retries has been made (code *750). The mailbox owner must obtain permission from the System Administrator to enable remote notification. The System Administrator must use code *710 or *711 to grant permission.

The remote notification activation time can be programmed so the administrator can decide on the daylights hours for the external notification to be activated. The time span of this service is programmed using code *490.

When permission has been granted and the mailbox owner enables remote notification, the unit first dials the external access digits (programmed using code *340) and then dials the mailbox owner’s remote telephone or pager number.

NOTE

Make sure that you enter the remote telephone or pager number before enabling remote notification.

Notification is always done on the second line.

4.4.3.3 Setting Notification for Mailboxes

NOTE

Do not forget to enter programming mode by dialing *900 and the administrator's password before using the programming commands.

Virtual mailboxes do not have extensions and may not be configured for internal notification.

Table 4-6: Program Notification for Mailboxes Commands

OPERATION	COMMAND
Setting local notification for a range of mailboxes	***700 + First Mailbox + Last Mailbox + X + #** where X = 0; notification is disabled X = 1; Message Light On 1 is selected X = 2; Message Light On 2 is selected X = 3; Sign Rings is selected X = 4; Rings is selected
Disable local notification for all mailboxes	***700 + #**
Setting local notification for one mailbox	***701 + Mailbox + X + #** where X is defined as above
Permitting remote notification for a range of mailboxes	***710 + First Mailbox + Last Mailbox + Y + #** where Y = 0; remote notification is not permitted Y =1; remote notification is permitted
Disable remote notification for all mailboxes	***710 + #**
Permitting remote notification for one mailbox	***711 + Mailbox + Y + #** Y = 0; remote notification is not permitted Y = 1; remote notification is permitted
Ring Notification Interval	***720 + XX** where XX is a 2 digit number in minutes (1-99). Default = 30 minutes
Ring Notification Duration	***730 + X** where X = 0; stands for short time for rings (default) X = 1; stands for long time for rings
Maximum number of days to store messages	***740 + XX** where XX stands for number of days (00-99). 00 = Messages are not deleted by Voice Mail.
Time to wait after off-hook for notification dialing	***741 + X** X = Time in seconds (0-9)

OPERATION	COMMAND
Number of Ring Notification retries	***750 + XX** where XX refers to the number of ring notification attempts. Default is 05.
Activate the LED notification	***760 + X** where X = 0; for 1st new message (Default) X = 1; for every new message.

4.4.4 Programming the Automated Attendant Script Menu

The unit supports up to 21 script messages (00-20) for building the Automated Attendant menu. The unit also supports another six script messages in three languages (21-26 for the first language, 31-36 for the second and 41-46 for the third) for Busy menu, No Answer menu, Do Not Disturb menu and Post Recording menu.

The opening scripts for each line are selected by command *112.

The following numbers are dedicated by default to specific script messages:

- Script message number 00 to the Day Mode Opening Menu
- Script message number 10 to the Night Mode Opening Menu
- Script message number 15 to the Break Time Opening Menu
- Script message number 20 to the Holiday Mode Opening Menu.

The rest of the script messages (01-09, 11-14 and 16-19) may be used in all modes without limitations. Each script message has three parts:

- Script message number
- Recorded announcement
- Programming that indicates the action to be taken when a caller dials one digit (0-9) or dials nothing during an announcement.

4.4.5 Recording Script Messages

Table 4-7 describes how to record script messages.

Table 4-7: Recording Script Messages Commands

OPERATION	COMMAND
Recording a script message	***100 + XX + Beep + Record + #**
Playback a script message	***101 + XX**
Deleting a script message	***102 + XX**

NOTE
XX is script message 00-26, 31-36 and 41-46.

4.4.6 Programming Script Messages

You can program each script message separately. The programming command format for script messages is:

*** + Command Code + XX + B + YY + #**

Where:

Command Code defines the action that should be taken when B is pressed during playback of script message XX.

XX = a script message number.

B = the digit dialed by the caller during playback of script message XX or at the end of the message. B can be 0-9 or * (for end of message).

YY = the destination, which can be an extension, mailbox or another script message.

NOTE
Do not define the Operator ID digit on script messages.

The command codes used to build the Automated Attendant Script Menu are presented on the following pages. You can program one of the following actions for each script message:

- Play another script message
- Return to the opening menu
- Play another script message and change the language
- Transfer the call to an extension
- Transfer the call to the operator
- Transfer the call to a mailbox
- Disconnect the line
- Leave a message in a mailbox
- Retrieve messages from a mailbox
- Direct dial to an extension
- Transfer a call directly to a mailbox
- Dial a free DTMF string
- Place a call on hold
- Blind Transfer to the busy extension
- Play the directory listing

Technicians and System Administrators should program the script messages according to the application.

4.4.6.1 End Of Message Timeout

Sets the EOM timeout period for each script individually.

Command: *105 + XX + Y + #

Where:

XX = Script number

Y = Timeout in seconds

Example: *105 05 6 #

The unit sets the EOM timeout to 6 seconds for script message 05.

4.4.6.2 Play Another Script Message

Builds submenus by transferring the caller from one script message to another.

Command: *110 + XX + B + YY + #

Example: *110 00 3 02 #

The unit plays script message 02 when “3” is dialed during playback of script message 00.

NOTE

Make sure to record script message 02.

4.4.6.3 Select Opening Script

Selects the opening script message.

Command: *112 + XX + YY + Z + #

XX = Default script number 00,10,15 or 20

YY = Replacement script number 00-20

Z = Line number 1-4

4.4.6.4 Transfer to the Main Company Greeting

Transfers the caller to the Main company greeting’s menu. Used mainly by Busy and No-Answer script messages (21-24 for the first language, 31-34 for the second language and 41-44 for the third language), where the caller is given the option to return to the main menu.

Command: *115 + XX + B #

Example: *115 21 5 #

The unit plays the opening menu when “5” is dialed during playback of script message 21.

4.4.6.5 Transfer to a Script Message and Change the Language

Changes the system language and plays another script message. The unit supports up to three system languages simultaneously (factory loaded).

Command: *117 + XX + B + YY + Z + #

XX = The current script message

B = The digit dialed by the caller during playback of script message XX

YY = The destination script message

Z = The system language digit (1, 2 or 3)

Example: *117 00 7 01 3 #

The unit changes to the third language and plays script message 01 when "7" is dialed during playback of script message 00.

NOTE
Make sure that script message 01 has been recorded in the appropriate language.

4.4.6.6 Select the Default Language

The unit can support up to three languages. The default language is the language the unit automatically uses if no other language has been selected.
To change the default language, dial *900 and the administrator password to enter the programming mode, then dial:

Command: *118 + Z + #

Z = 1 is the first language (default)

Z = 2 is the second language

Z = 3 is the third language

NOTE
The available languages are listed on the bottom panel of the unit.

4.4.6.7 Transfer the Call to an Extension

Transfers the caller to an extension or department (hunt group).

The designated extension number may contain up to 4 digits and does not have to be in the range of legal extensions.

Command: *120 + XX + B + extension number + #

Example 1: *120 05 3 123 #

The unit transfers the call to extension 123 when "3" is dialed during playback of script message 05.

Example 2: *120 00 * 1000 #

The unit transfers the call to hunt group 1000 at the end of script message 00.

4.4.6.8 Dialing a Programmed DTMF String from the Auto-Attendant Script

Dialing a programmed DTMF string from the Auto-Attendant script.

Command: *121 + XX + B +YY+ #

Y = The DTMF string number (00-19)
See also command *381

4.4.6.9 Transferring the Call to the Operator at the End of the Script Message

Transferring the call to the operator at the end of the script message: The unit transfers the call in supervised, semi-supervised or non-supervised mode depending on code *350.

Command: *125 + XX + #

Example: *125 00 #

The unit transfers the call to the operator at the end of script message 00.

4.4.6.10 Transferring the Call to a Mailbox

Transferring the caller to a specific mailbox number: The mailbox must be defined and existing.

Command: *130 + XX + B + Mailbox number + #

Example: *130 01 5 152 #

Transfers the call to mailbox 152 when “5” is dialed during playback of script message 01.

4.4.6.11 Disconnecting the Line

Disconnects the call at the end of the script message or if the caller dialed the disconnect digit during playback.

This command may include the system message 001.

Command: *140 + XX + B + Z + #

Z = 0; means disconnect the line with no message.

Z = 1; means disconnect the line with the above system message

Example: *140 10 * 1 #

The unit plays the disconnection message and then disconnects the call at the end of script message 10.

4.4.6.12 Leaving a Message in a Mailbox

Initiates the procedure for leaving a message in a mailbox.

Command: *150 + XX + B + #

Example: *150 00 8 #

The unit asks for a mailbox number when “8” is dialed during playback of script message 00. After dialing the requested mailbox number, the caller hears the mailbox’s greeting and can leave a message.

4.4.6.13 Retrieving Messages from a Mailbox

Initiates the procedure for retrieving messages from a mailbox.

Command: *160 + XX + B + #

Example: *160 00 9 #

The unit asks for a mailbox number and password when “9” is dialed during playback of script message 00. After dialing the requested mailbox number and password, the mailbox owner can retrieve his messages and access the user menu to record a personal greeting, change his password, etc.

4.4.6.14 Directing a Call to an Extension

Enables the caller to dial an extension directly by programming the first digit of the extension. When a caller dials the first digit of an extension during playback of a script message, the unit stops the message and waits for the rest of the digits of the extension. The number of digits in an extension is defined by code *300. You can enter up to four different digits.

Command: *170 + XX + first digit(s) + #

Example 1: *170 00 2 #

The unit waits for the rest of the extension number when “2” is dialed during playback of script message 00. After the caller dials the rest of the extension number, the unit transfers the call to the extension.

Example 2: *170 00 2 4 #

Same as Example 1, except the extension number starts with 2 or 4 (for extension numbers 2xx and 4xx).

4.4.6.15 Transferring a Call Directly to a Mailbox

Transfers the call directly to a mailbox number. This feature is similar to directly dialing an extension, except the call is transferred directly to a mailbox. You can enter up to four different digits.

Command: *175 + XX + first digit(s) + #

Example 1: *175 00 2 #

The unit waits for the rest of the mailbox number when "2" is dialed during playback of script message 00. After the caller dials the rest of the mailbox number, the unit transfers the call to the mailbox.

Example 2: *175 00 2 4 #

Same as Example 1, except the mailbox number starts with 2 or 4.

4.4.6.16 Placing a Call on Hold

Gives the caller the option to remain on hold. Valid only for script messages 21-22 (for the first language), 31-32 (for the second language) and 41-42 (for the third language), which are reserved for the extension Busy menus.

Command: *180 + XX + B + #

Example: *180 21 3 #

The unit places the call on hold for 10 seconds before trying to transfer the call again when "3" is dialed during playback of script message 21.

4.4.6.17 Blind Transfer to a Busy Extension

Transfers a call in blind mode to a busy extension. Valid only for script messages 21-22 (for the first language), 31-32 (for the second language) and 41-42 (for the third language), which are reserved for the extension Busy menus.

Command: *185 + XX + B + #

Example: *185 21 5 #

The unit immediately tries to transfer the call again when "5" is dialed during playback of script message 21.

NOTE

Both Place a Call on Hold and Blind Transfer to a Busy Extension are used to transfer calls to a busy extension. Place a Call on Hold gives the option to retry every 10 seconds to transfer the call until the extension is available.

In a Blind Transfer, calls are transferred to a Busy Extension immediately. This option is used when the unit is connected to a PBX that incorporates In-Band DTMF signaling.

4.4.7 Directory Listing Programming

The directory-listing feature (Dial By Name) allows calls to be transferred to proper extensions based on recorded names and codes of mailbox owners. The Directory Listing parameters are set through the commands explained in the following paragraphs.

4.4.7.1 Directory Listing Format

Changes the format of the directory listing. The unit supports two directory listing formats.

Command: *011 + X

X = 0; List according to last name (Default)

X = 1; List according to first name

4.4.7.2 Transferring to Directory Listing

Transfers the call to the directory listing.

Command: *111 + XX + B + #

XX = Script number

Example: *111 00 5 #

Play the directory listing when “5” is dialed during playback of script message 00.

4.4.8 Resetting Script Message Programming to Default

Resets a complete script message or only one entry. This command does not delete the recorded script message.

Resetting a complete script message:

Command: *190 + XX + #

Example: *190 03 #

Resets script message 03 to its default values.

Resetting a single entry in a script message:

Command: *190 + XX + B + #

Example: *190 02 5 #

Resets entry 5 in script message 02 to its default value.

Default values:

- 0-9. If a caller dials a digit that has not been programmed (or set to default) during playback of a script message, the unit plays “This entry is not supported” and repeats the script message.
- If the caller dials the Operator ID code, the call is forwarded to the operator extension regardless of script message programming.
- At the end of a script message. If the caller does not dial a number during playback of a script message, the unit disconnects the call at the end of the message.

4.4.9 Supervised, Semi-Supervised and Non-Supervised Transfers

Transfer to an extension may be supervised, semi-supervised or non-supervised. In a supervised mode, the unit detects Busy and No-Answer signals from the PBX. In a semi-supervised mode, the unit only detects Busy signals. In a non-supervised mode, the unit transfers a call to the required extension without checking the status of the extension.

You can configure the unit to detect Answer, Busy and Do Not Disturb signals by recognizing the DTMF codes sent by the PBX or analyzing the Call Progress tones.

If DTMF signals are selected for the supervised mode, you must define DTMF codes for the Answer, Busy and Do Not Disturb conditions.

NOTE
Do not forget to enter programming mode by dialing *900 and the administrator’s password before using the programming commands.

Table 4-8: Detection Commands

Operation	Command
Selecting DTMF code or Call Progress tone detection	***220 + X** where X = 0; Supervised call transfer using Call Progress tones (default) X = 1; Supervised call transfer using DTMF codes
Defining the DTMF code for the Answer condition, Busy condition and Do Not Disturb condition	***221 + X + CODE[1] + #** X = 1; Answer condition X = 2; Busy condition X = 3; Do Not Disturb condition CODE[1] = DTMF code sent by the PBX for the Transfer Supervision operation 0-9,*,#,A-D See page 26 for the proper codes
Delete all DTMF condition codes	***221 + #**

Operation	Command
Delete all DTMF condition codes	***221 + #**
Delete the DTMF code for a specific condition	***221 + X + #** X = 1; Answer condition X = 2; Busy condition X = 3; Do Not Disturb condition

If you select Call Progress tone supervision, the unit detects a busy tone based on the cadence parameters set using code *371. It detects an answer when voice is recognized. The unit does not check for Ring-Back tone cadences.

The unit distinguishes between two types of transfers:

- Transfer to operator
- Transfer to the rest of the extensions.

Table 4-9 explains how to program supervised, semi-supervised and non-supervised transfers to the operator and to the rest of the extensions.

Table 4-9: Transfer Modes Programming Commands

Operation	Command
Transfer mode for all extensions	***350 + X + Y** where X = 1; All extensions except the operator X = 2; Operator extension only Y = 0; Non-Supervised (Default) Y = 1; Supervised Y = 2; Semi-Supervised

4.4.9.1 Detecting a Busy Extension

If the unit detects a busy extension, it performs a Recall-from-Busy and by default plays system message 96 (if the extension has a mailbox) or 103 (if the extension does not have a mailbox).

4.4.9.2 Detecting a No Answer from an Extension

If the unit does not detect an answer from the extension, it performs a Recall-from-No-Answer and by default plays system message 97 (if the extension has a mailbox) or 104 (if it does not have a mailbox).

4.4.9.3 Changing the Busy and No Answer Menus

System messages 96, 97, 103, and 104 are default messages. The System Administrator can replace the system messages with script messages as follows:

- System message 96 (Busy and the extension has a mailbox) is replaced by script message 21 in the first language, script message 31 in the second language and 41 in the third language.
- System message 103 (Busy and the extension does not have a mailbox) is replaced by script message 22 in the first language, script message 32 in the second language and 42 in the third language.
- System message 97 (No-Answer and the extension has a mailbox) is replaced by script message 23 in the first language, script message 33 in the second language and 43 in the third language.
- System message 104 (No-Answer and the extension does not have a mailbox) is replaced by script message 24 in the first language, script message 34 in the second language and script message 44 in the third language.

4.4.9.4 Do Not Disturb

Using the user menu, a mailbox owner can activate the Do Not Disturb mode. When a caller dials a Do Not Disturb extension, the unit plays system message 121 and does not transfer the call to the extension. The System Administrator can replace this message with script message 25 in the first language, script message 35 in the second language and script message 45 in the third language.

4.5 Additional Features

4.5.1 Changing Passwords

The unit uses three types of passwords:

- System Administrator's password
- Operator's password
- Mailbox owner's password.

A password always contains four digits (0-9). The default for all three types of passwords is 1234.

4.5.1.1 Changing the System Administrator's Password

The System Administrator can change his password by dialing code *900 to enter the programming mode, dialing the current password and then dialing:

*600 + * + Old Password + * + New Password + #

The system administrator password must be between 4 and 8 digits long.

NOTE

Do not use spaces, letters, * and # keys.

The System Administrator's password cannot be disabled.

4.5.1.2 Changing the Operator's Password

The System Administrator can change the operator's password by dialing code *900 to enter the programming mode, dialing the System Administrator's password and then dialing:

*601 + * + Old Password + New Password + #

Operator's password must be 4 digits long.

NOTE

Do not use spaces, letters, * and # keys.

To disable the operator's password, enter "0000".

4.5.1.3 Resetting the Mailbox Password

The System Administrator can reset a mailbox password to its default (1234) by dialing code *900 to enter the programming mode, dialing the System Administrator's password and then dialing:

*570 + XXXX + #

Where:

XXXX is the mailbox number.

The mailbox owner can change the mailbox password.

4.5.2 Activate Flash Memory Force Reorganize

The Flash memory reorganize option automatically reorganizes and optimizes the data stored in the unit.

The system administrator can activate the Flash memory Force Reorganize option by calling the unit and, during the opening greeting, dialing:

*900 + Password + *610

NOTE

This option cannot be deactivated, and should be activated by a certified technician only.

4.5.3 Changing to/from Day Light Saving Time

The operator can change to/from Day Light Saving time by calling the unit and, during the opening greeting, dialing:

*7 + XXXX + Y

XXXX = the operator's password.

This password can be disabled.

Y = 0; reduces the time by one hour

Y = 1; increases the time by one hour.

4.5.4 Changing the Operational Mode

The operator can change the operational mode by calling the unit and, during the opening greeting, dialing:

*8 + XXXX + Y

XXXX refers to the operator's password.

This password can be disabled.

Y = 0; Day Mode

Y = 1; Night Mode

Y = 2; Holiday Mode

Y = 3; Auto Mode

Y = 4; Break Mode

4.5.5 Playing a System Message

To listen to any system message, dial *900 and the administrator password to enter the programming mode, then dial:

*690 + Z + XXX

Z = the language number

Z = 1 is the first language

Z = 2 is the second language

Z = 3 is the third language

XXX is the message number

See Chapter 12 for a list of system messages.

4.5.6 Playing All System Messages

To listen to all system messages, dial *900 and the administrator password to enter the programming mode, then dial:

*691 + Z

Z = the language number

Z = 1 is the first language

Z = 2 is the second language

Z = 3 is the third language

See Chapter 12 for a list of system messages.

4.5.7 System Message Setting

To determine if some of the system messages are played, dial *900 and the administrator password to enter the programming mode, then dial:

*699 + X + Y

Where:

X = system message affected:

X = 1 system message 004

X = 2 system message 102

X = 3 system message 095

Y = 0 play the message (default)

Y = 1 do not play the message

Y = 2 (only when X = 3) plays message to mailboxes without a greeting message

4.5.8 Listening to the Software Version Number

To hear the unit's software version number, dial *900 and the administrator password to enter the programming mode, then dial:

*680

4.5.9 Resetting the System

The System Administrator can reset the unit to its factory default settings by dialing *900 and the administrator password to enter the programming mode, then dial:

654 + * + XXXX + #

Where:

XXXX = the System Administrator's password.

NOTE

If you plan to reconfigure the unit for use with your current PBX and the unit had previously been configured for use with a different PBX type, use this command to clear all existing settings and return to the factory default settings.

4.5.10 Adjusting Recording Length

The System Administrator can select the length of the recorded messages in the unit. The selected length of message (in minutes) will affect all recorded messages. The types of recorded messages that are affected are: script recordings, mailbox owner's greetings, name recordings and recorded incoming calls.

To set message length dial *900 and the administrator password to enter the programming mode, then dial:

*790 + X

X = 1-9 minutes.

This parameter is set to two minutes by default.

Chapter 5: Switching to Computer Programming

5.1. General

This section describes the purpose and main features of the Voice Mail Maintenance Software (VMS) and details the installation process. The VMS enables you to:

- Define PBX parameters
- Set the unit clock and calendar
- Create and maintain mailboxes
- Build Automated Attendant menus
- Review traffic statistics
- Print system parameters and statistics.

Programming the unit via the PC is done offline until sent in one block to the unit. We recommend that you save the new configuration in a file.

Using the VMS, you can also:

- Open a configuration file to make changes and then to upload them to the unit
- Recognize connected unit
- Open the corresponding default configuration file
- View unit statistics, e.g. line and memory utilization.

5.2. Connecting the Unit to the Computer

➢ **To enter the programming mode:**

.1 Remove the side panel cover of the unit.

2. Remove all cables attached to the unit's RS-232 connector.
3. Connect one end of the RS-232 cable to an available serial port on your PC and the other end to the unit's RS-232 connector as shown in Figure 5-1.

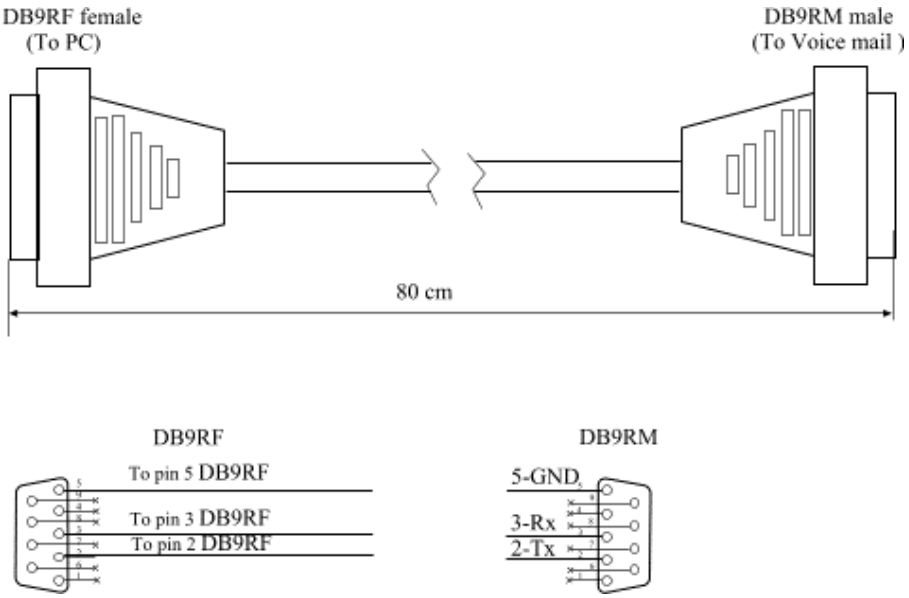


Figure 5-1: RS-232 Cable Connection

5.3. System Requirements

Before installing the VMS, check that your computer meets the following minimum requirements:

- PC Pentium II or higher
- Set the unit clock and calendar
- Create and maintain mailboxes
- 64 MB RAM memory
- 40 MB free hard disk space
- Microsoft Windows 95, Windows 98,Windows NT SP64, Windows 2000 Pro and Windows XP
- Internet Explorer 5.5 or higher

5.4. Installing the VMS

➢ **To install the VMS:**

1. Exit all open applications.
2. Insert the CD with the VMS installation program into the CD drive.
3. Use Windows Explorer to locate the setup file.
4. Double-click the setup file.
5. Follow the instructions on the screen.

5.5. Starting VMS

To start the VMS click on the VMS icon. The application will offer to select relevant Com port for read configuration data from the device.

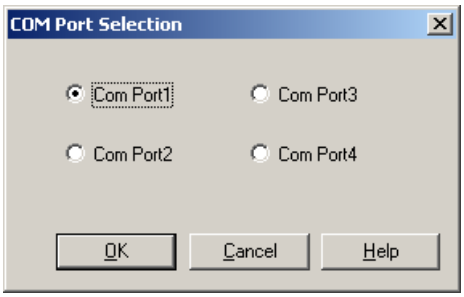


Figure 5-2: COM Port Selection Window

Select a COM port and press **OK**.

NOTE

To continue to work in Off line mode press Cancel.

Applications will start to download configuration data. During transfer process the target device will be recognized automatically. The device's name will be shown on the Main screen.

For to continue to work in offline mode application will offer to select the device, for which configuration file will be created.

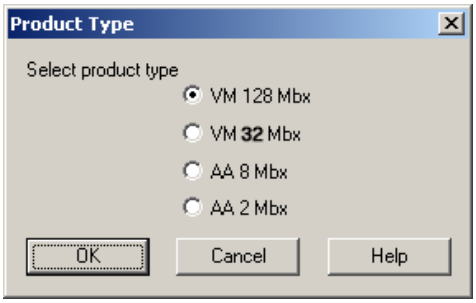


Figure 5-3: Product Type Window

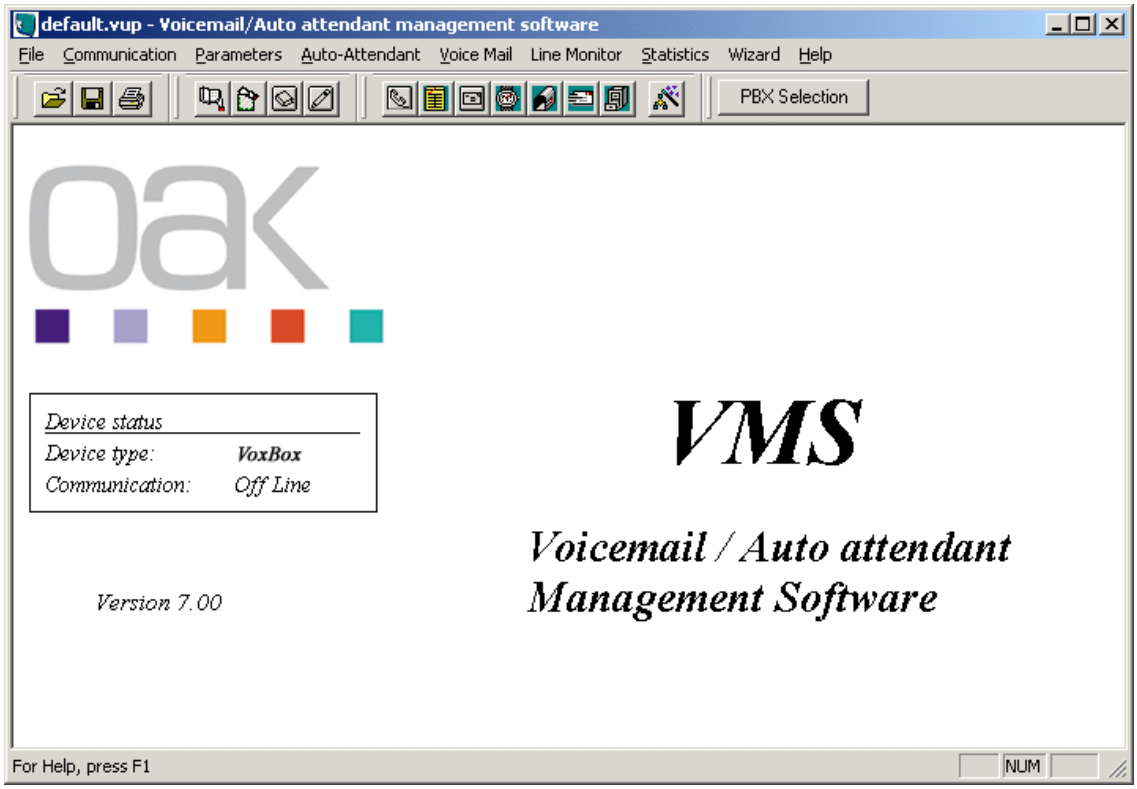


Figure 5-4: Main Screen

NOTE

To continue to work in Off line mode press Cancel.

5.5.1. Communication Setup

The communication between the PC and unit needs to be checked initially. By default, COM Port 1 is used to send data to and receive data from the unit. To change this setting:

1. Select **Communication→ComPort**. **COM PORT Selection** window opens (Figure 5-2).
2. Select the relevant COM Port and click **OK**. You can now use the VMS to program the unit.

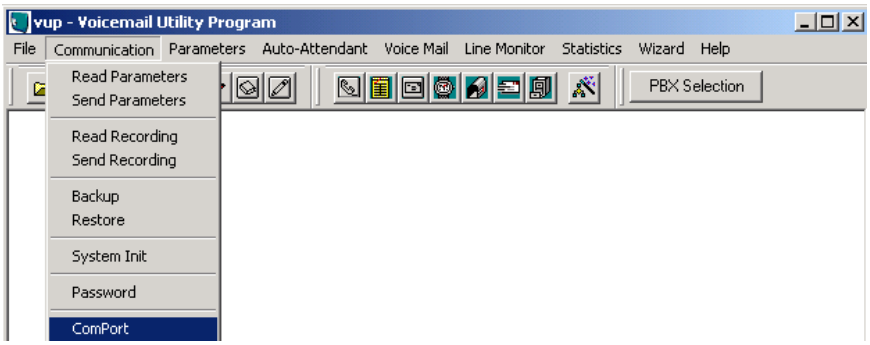


Figure 5-5: Communication Menu

Chapter 6: VMS Programming

6.1. General

This chapter describes all menu item. In some cases, the DTMF commands are added as an extra reference and examples are clarified.

6.2. File Menu

Via the **File** menu you can execute the functions **Open**, **Save**, **Save As**, **Open Default**, **Print Settings Menu**, **Print**, **Print Preview**, **Print Setup**, **Options** and **Exit**.

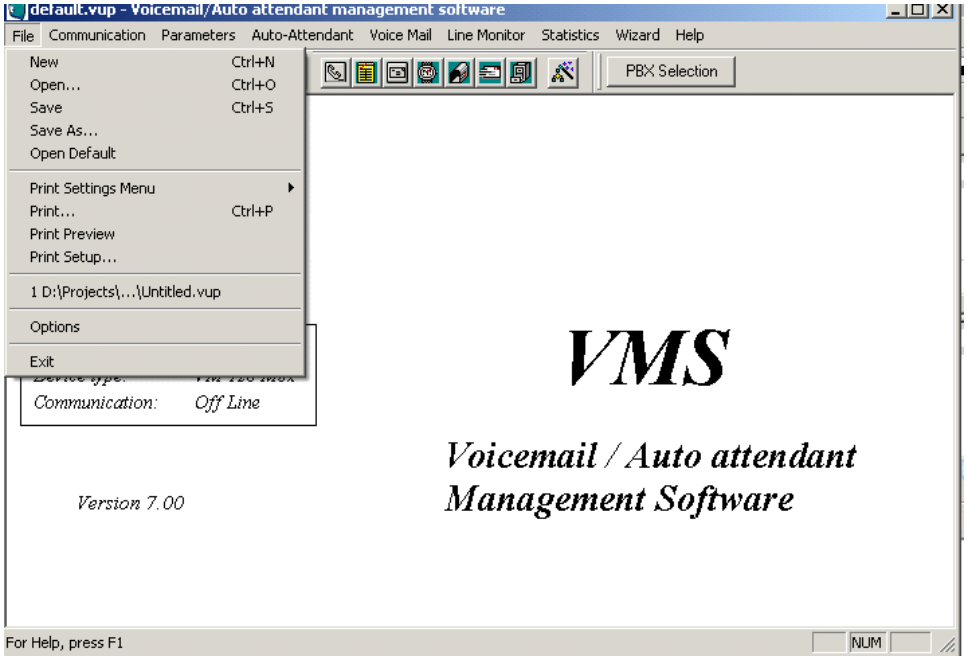


Figure 6-1: File Menu

6.2.1. Open

The Open function from the **File** menu opens the **Product Type** window (Figure 6-2), where you can define the target device and then standard Windows **Open** screen (Figure 6-3), via which you can open an existing configuration file.

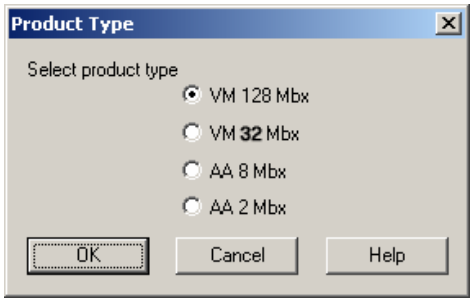


Figure 6-2: Product Type Window

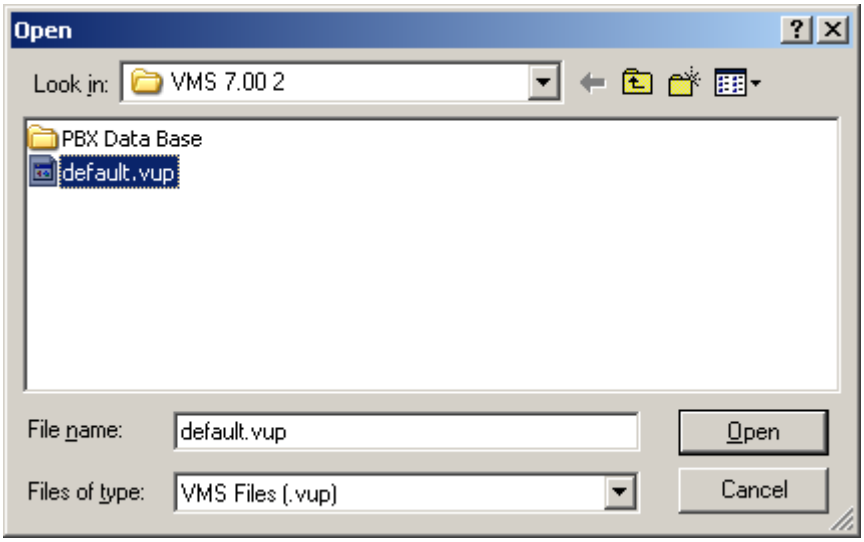


Figure 6-3: Open Window

6.2.2. Save

The **Save** function from the **File** menu saves the current open and previously saved file over the existing file on the hard disk. In case the file has not been saved previously, the **Save As** screen will appear.

6.2.3. Save As

The **Save As** function from the **File** menu saves the current open file with the specified name in the specified directory. You can save files with the following extensions:

*.VUP corresponding to VoxBox

*.VUJ corresponding to VoxBox Lite

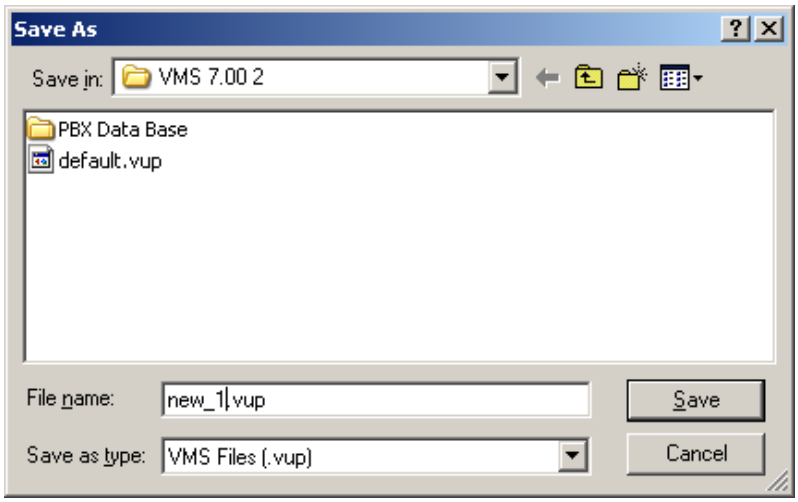


Figure 6-4: Save As Window

6.2.4. Open Default

The **Open Default** function in the **File** menu opens the default device's file. You must first specify the target device.

6.2.5. Print Settings Menu

The **Print Settings** menu function in the **File** menu (Figure 6-5) opens a submenu in which you can define the parameters for printing.

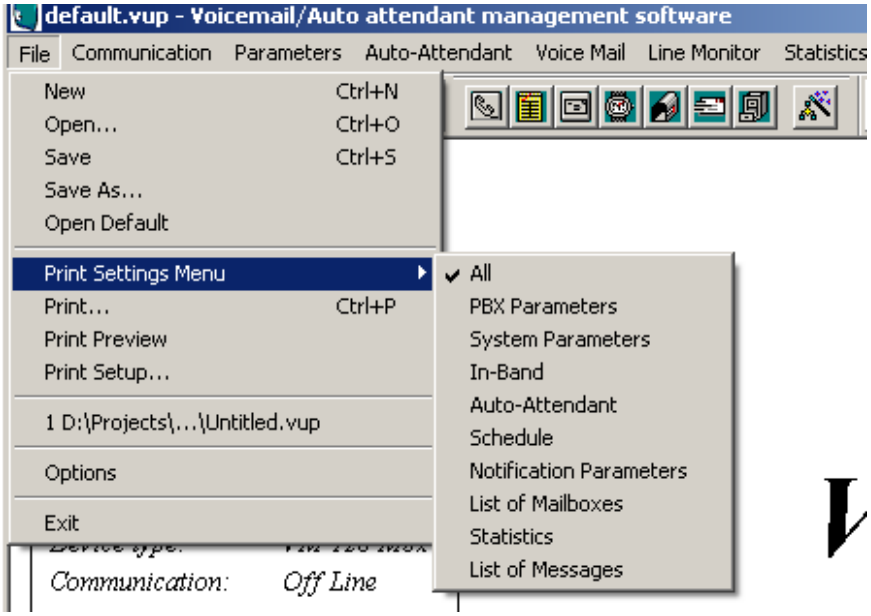


Figure 6-5: Print Settings Menu

6.2.6. Print

The **Print** function in the **File** menu opens the default Windows Print window.

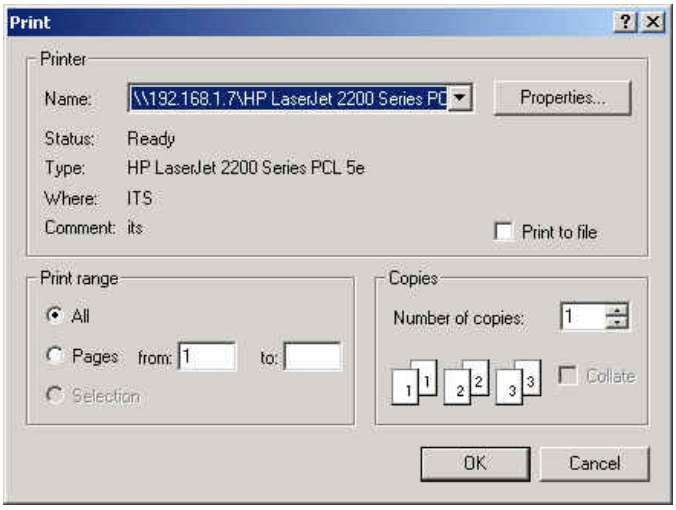


Figure 6-6: Print Window

6.2.7. Print Preview

The **Print Preview** function in the **File** menu (Figure 6-7) shows a default Windows preview of the parameters that need to be printed.

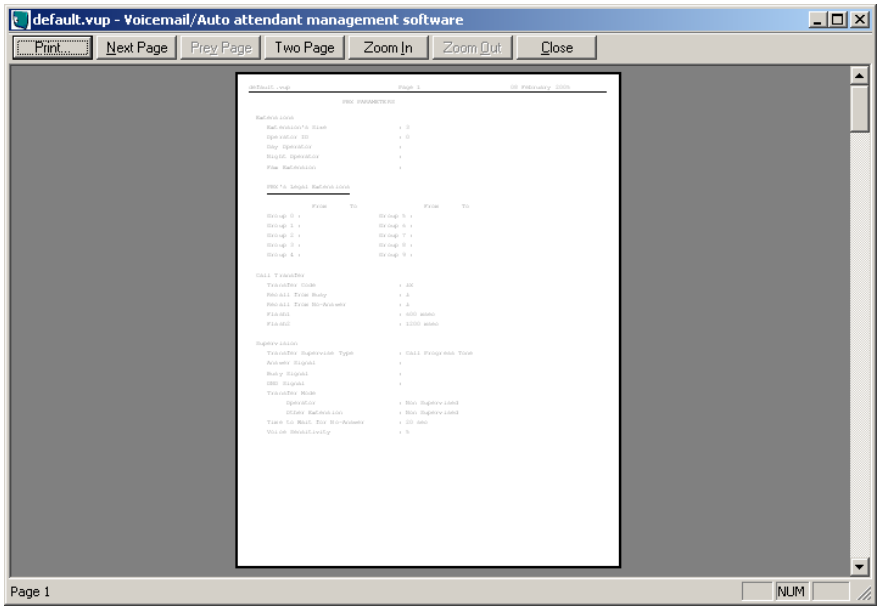


Figure 6-7: Print Preview Window

6.2.8. Print Setup

The **Print Setup** function in the **File** menu (Figure 6-8) opens a default Windows Print Setup window.

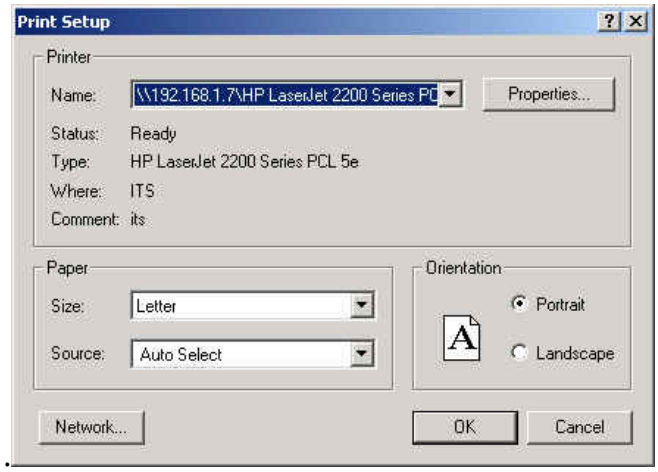


Figure 6-8: Print Setup Window

6.2.9. Options

The **Options** function in the **File** menu consists of two screens: The **Toolbar Configuration** screen and the **File Location** screen.

6.2.9.1. Toolbar Configuration

In the **Toolbar Configuration** screen (Figure 6-9) you can select the toolbars and tooltips that will be displayed.

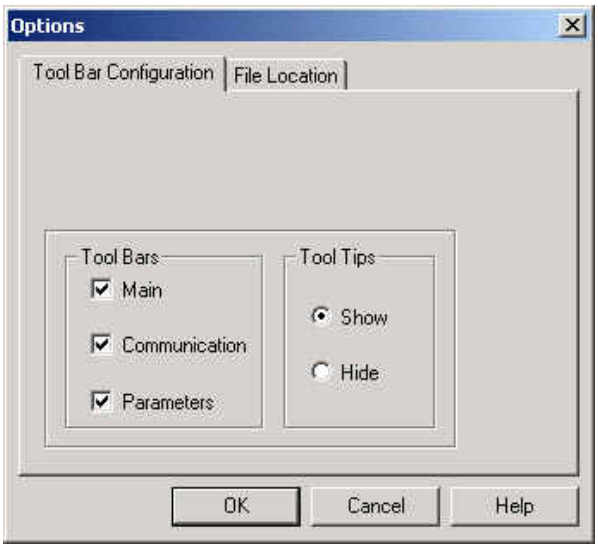


Figure 6-9: Options Window – Toolbar Configuration Tab

6.2.9.2. File Location

In the **File Location** screen (Figure 6-10) you can define the save and load location of the files. By default, the location is the same as where the VMS.EXE program is stored.

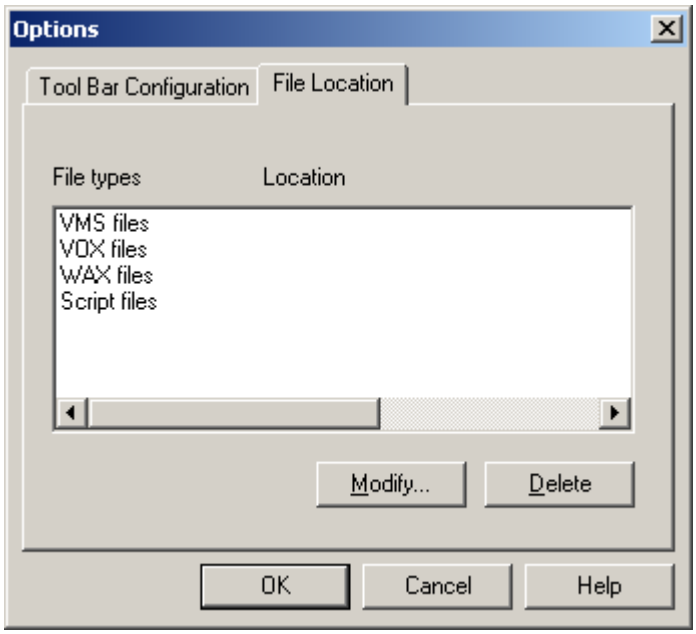


Figure 6-10: Options Window – File Location Tab

6.2.10. Exit

The **Exit** function in the **File** menu closes the VMS program. If you have made changes to the parameters and not saved the file, the program will ask if you want to save the configuration file before exiting the program.

6.3. Communication Menu

Via the **Communications** menu you can execute the functions **Read Parameters**, **Send Parameters**, **Read Recording**, **Send Recording**, **Backup**, **Restore**, **System Init**, **Password** and **ComPort**.

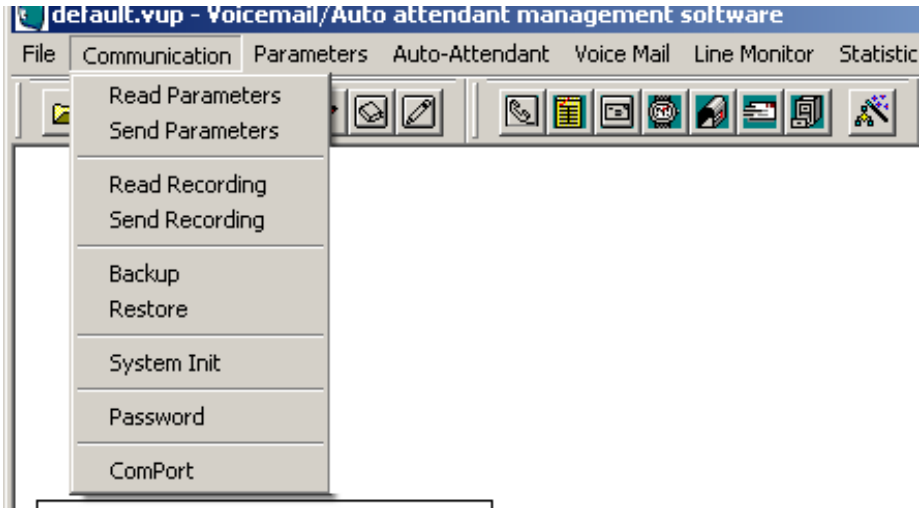


Figure 6-11: Communication Menu

6.3.1. Read Parameters

The **Read Parameters** function in the Communications menu reads the information from the Voice Mail to PC. You can edit this information.

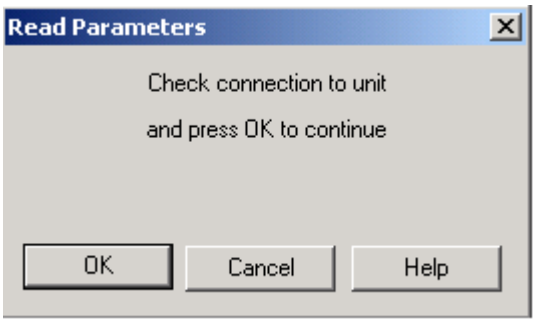


Figure 6-12: Read Parameters Window

NOTE

When reading parameters from the unit, the system will not answer any calls.

6.3.2. Send Parameters

The **Send Parameters** function in the **Communications** menu sends the edited information from the PC into the unit (Figure 6-13). After clicking **OK**, a screen asking for the administrator password appears.

Figure 6-13: Send Parameters Window

Figure 6-14: Password Window

NOTE

Before editing and sending parameters in the VMS, FIRST perform a read action, otherwise you may overwrite the existing information with default information or other incorrect information.

When sending parameters to the unit, the system will not answer any calls.

6.3.3. Read Recording

The **Read Recording** function in the **Communications** menu reads the script recordings from the unit to the VMS. You can edit this information or send it to another unit.

Figure 6-15: Read Recording Window

NOTE

The script recordings in the unit are not .WAV files, but special DSP formatted files. WAV files cannot be converted to this format.

To copy a script from one unit to another, the scripts need to be recorded via telephone for the first unit. The scripts can then be transferred via the Read/Send Recording functions to another unit.

6.3.3.1. List of Script Recordings to be Read

The **List of Script Recordings** button shows a screen in which scripts can be selected. After selecting Script Recording numbers from the list (Figure 6-16) and pressing the **Add** button, you need to define the location where to store them (they will be stored with the extension of the Script Recording number e.g. script.10, script.00). The delete button is used to unselect the chosen script(s).

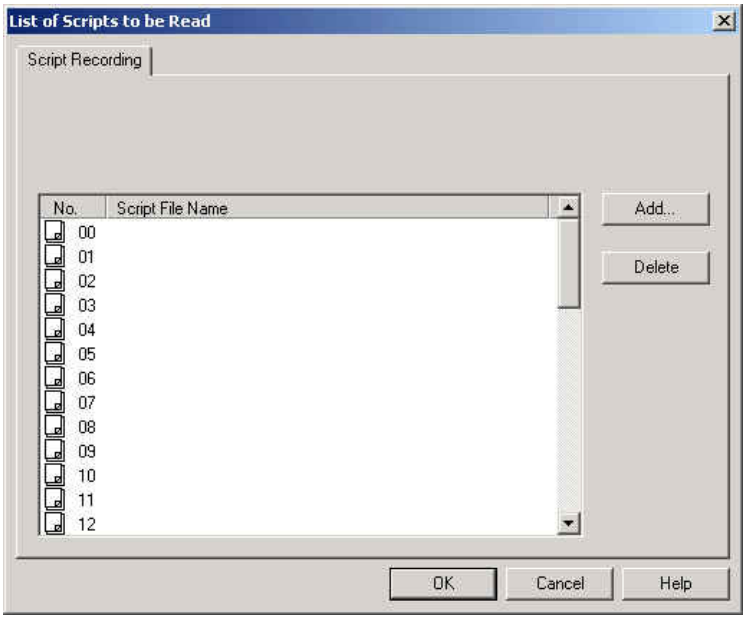


Figure 6-16: List of Scripts to be Read Window

6.3.4. Send Recording

Figure 6-17: Send Recording Window

The Send Recording function in the Communications menu sends the script recordings from the VMS into the unit.

6.3.4.1. List of Script Recordings to be Sent

The **List of Script Recordings** button shows a screen in which scripts can be selected. After selecting Script Recording numbers from the list and pressing the **Add** button, you need to select the files from the location where they were stored (They will have the extension of the Script Recording number e.g. script.10, script.00, see Figure 6-18). The delete button is used to unselect the chosen script(s).

When a Script Recording needs to be replaced by another Script Recording number (e.g. Script 10 needs to replace the script linked to Script Recording number 4), perform the following steps:

1. Select the Script Recording number to be updated.
2. Click **Add**.
3. Change the File of Type to **All Files**.
4. Select the Script Recording that must be used.
5. Click **OK**. The script had been replaced.

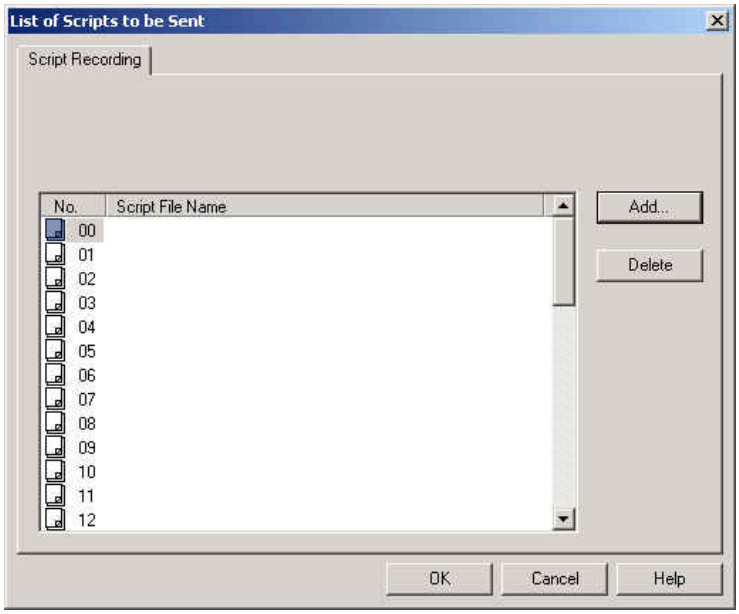


Figure 6-18: List of Scripts to be Sent Window

6.3.5. Backup

The **Backup** function in the **Communications** menu enables a full backup of the unit, containing all scripts, messages, personal greetings and parameters. The information is collected in a WAX file.

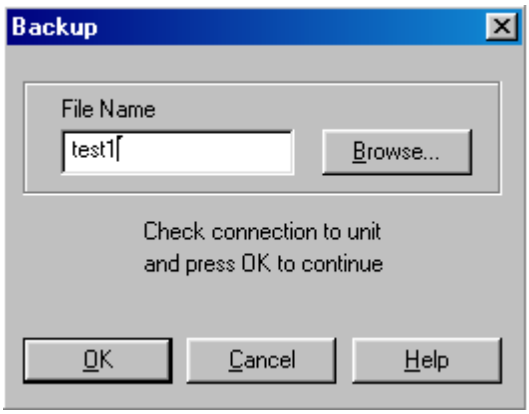


Figure 6-19: Backup Window

6.3.6. Restore

The **Restore** function in the **Communications** menu enables a full restore of the unit. The WAX file contains all scripts, messages, personal greetings and parameters.

Figure 6-20: Restore Window

NOTE

You can use a WAX file to transfer the identical contents from one unit to another.

6.3.7. System Init

The **System Init** function in the **Communications** menu is used to reset or update the unit and to clear the flash memory. The VOX file contains all system messages and language combinations. After a System Init, the unit will return to the manufacturers defaults.

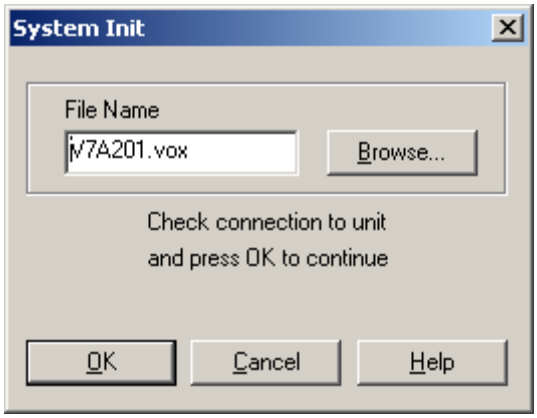


Figure 6-21: System Init Window

6.3.8. Password

The **Password** function in the **Communications** menu provides the possibility to change the administrator's password. The password may be 4 to 8 digits long only. The default is 1234.

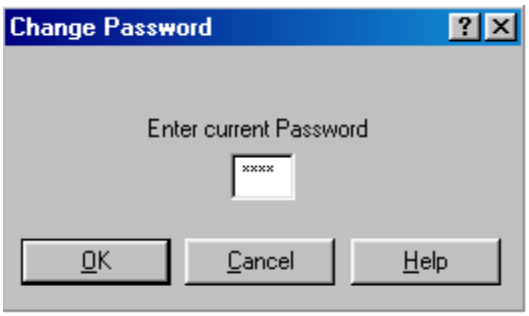


Figure 6-22: Change Password Window

6.3.9. ComPort

The **ComPort** function in the **Communications** menu enables you to change the communication port number, used to enable the communication between the PC and the unit.

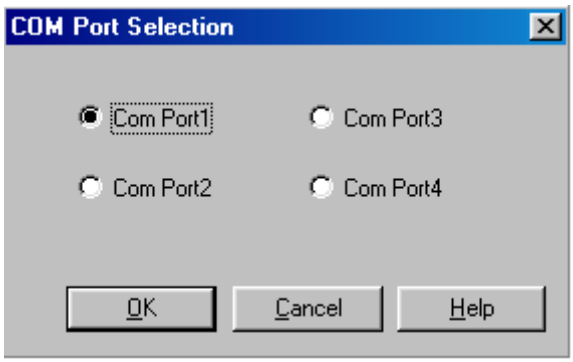


Figure 6-23: COM Port Selection Window

6.4. Parameters Menu

Via the **Parameters** menu you can execute and configure the functions **PBX Parameters**, **System Parameters** and **In-Band DTMF Protocol**.

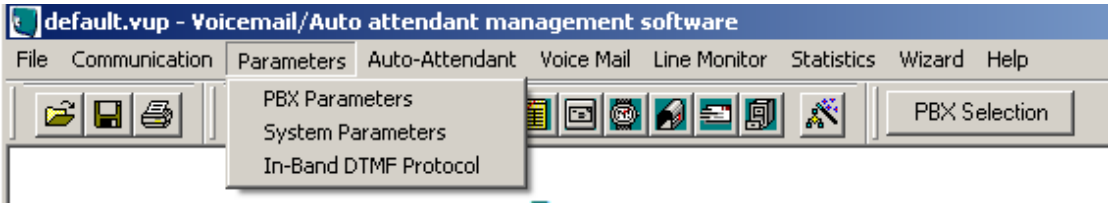


Figure 6-24: COM Port Selection Window

6.4.1. PBX Parameters

The PBX Parameters function in the Parameters menu consists of a number of tabs, which will be detailed separately.

6.4.1.1. Extensions

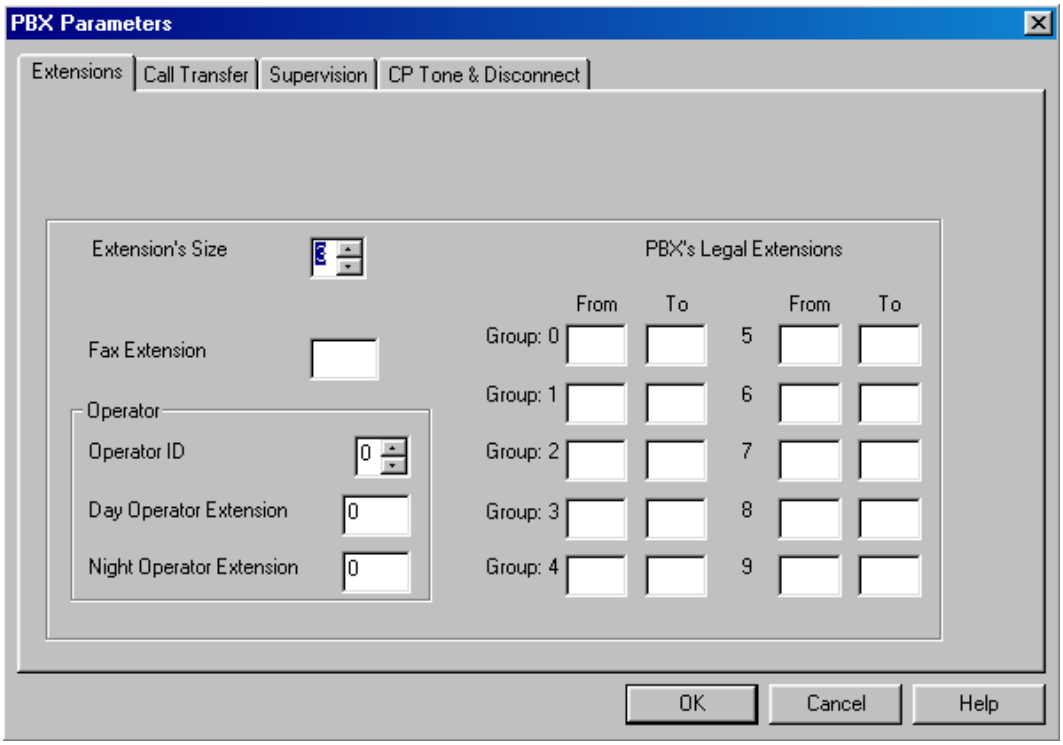


Figure 6-25: PBX Parameters Window – Extensions Tab

Extension's Size – The PBX extension size needs to be defined. This refers to the numbering plan of the PBX, for example: if the extensions in the PBX are from 200 to 299, then the extension size is 3 digits. Please note that 2, 3 or 4 can be used and the default is 3.

Command**:** *300

Fax Extension – The fax extension number is entered in this box. The Voice Mail will detect the fax tone, (1100 Hz), and immediately transfer the call to this extension. In order to disable this feature, leave the box empty.

Command**:** *360

Operator ID – The digit defined here will route calls to an operator's extension during the auto attendant scripts menus and from users mailboxes. Depending on the operation mode the call will be transferred to either the day or night operator extension.

Command: *330

NOTE

Make sure that the day and night operator extensions are configured.

Day Operator Extension – The extension number defined here is the number that will be used whenever the operator ID digit is accessed while the Voice Mail is in **Day Mode**.

Command: *360

NOTE
Make sure that the day and night operator extensions are configured.

Night Operator Extension – The extension number defined here is the number that will be used when the operator ID is accessed while the Voice Mail is in **Night, Break or Holiday Mode.**

Command: *360

NOTE
The legal entries are any numbers up to 4 digits and the default is 0.

PBX Legal Extensions – This is the range of extension numbering from the PBX. Here extensions are filtered for the Direct Calling from the Auto Attendant. If there are a certain designated extensions that do not want theDirect Call function that extension is left out in the groups of extensions.

For example: Group 0 has the extensions 200 – 203 and Group 1 has the extensions 205 – 299 this means that extension 204 cannot be directly contacted from the Auto-Attendant scripts and if that extension is tried from any script, then the Voice Mail will say, “Invalid entry, please try again”.

Command: *320

6.4.1.2. Call Transfer

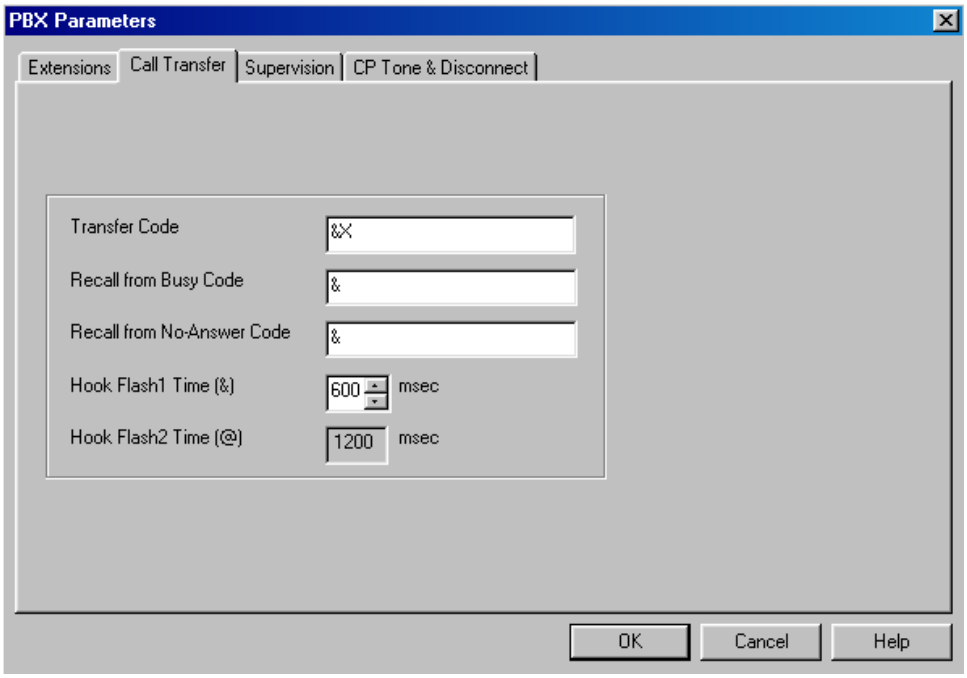


Figure 6-26: PBX Parameters Window – Call Transfer Tab

Transfer Code - This code is used to transfer a call from an analog extension to another. & = Represents a Hook Flash X = Represents an Extension number DTMF = O- 9, A-D P = Pause 1sec Command: *380
Recall from Busy Code – This code is only applicable for semi or supervised modes and it defines the PBX code that is used in order to return the caller to the Voice Mail when the desired party is busy. Command: *380
Recall from No-Answer Code – This code is only applicable for supervised mode and it is used to return the caller to the Voice Mail when the caller has been transferred to an extension that is not answered. Command: *380
Hook Flash Time (&) – Here the Hook Flash time of the PBX is defined. Command: *370
Hook Flash Time 2 (@) – This is **not** a programmable parameter and its only used in cases where disconnect (@) is added to the code.

6.4.1.3. Supervision

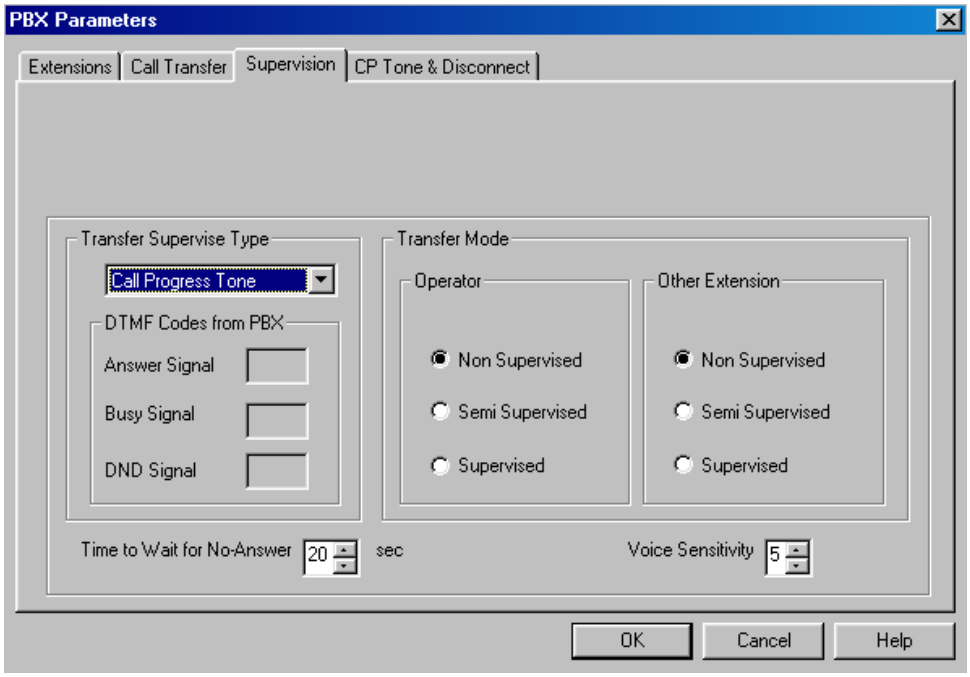


Figure 6-27: PBX Parameters Window – Supervision Tab

Transfer Mode – By selecting a radio-button you can define the operation mode for the Voice Mail's Auto Attendant. **Non-Supervised** is when the Voice Mail transfers the call without checking the status of the target extension, **Semi-Supervised** is when the Voice Mail only recognizes the busy signal from the PBX and **Supervised** is when the Voice Mail check for busy signal from the PBX and no-answer time out.

Command: *350

Call Progress Tones – In this drop-down menu, the method used to detect answered, busy and DND (Do Not Disturb) status when a call is being transferred to an extension in semi or supervised mode. The two options are either **Call Progress Tones** or **DTMF**. For Call Progress Tones, the Voice Mail samples the sounds from the PBX, such as busy or disconnect tones, and in the case of DTMF, the Voice Mail waits to receive DTMF signals from the PBX for busy, no answer and DND.

Command: *220

DTMF Codes from PBX – The answer, busy and DND signals are only programmable when changing the default from CPT to DTMF.

Answer Signal – is the DTMF signal sent from the PBX to the Voice Mail when a call is answered in supervised mode. (off hook signal)

Busy Signal – is the DTMF signal sent from the PBX to the Voice Mail when a call is transferred to a busy extension while in supervised mode.

DND Signal – is the DTMF signal sent from the PBX to the Voice Mail when a call is transferred to an extension in Do Not Disturb mode in supervised mode.

Command: *221

Time to Wait for No Answer – In this selection box, the time for the Voice Mail to wait for answer after transferred a call in supervised mode .the default is 20 seconds.

Command: *311

Voice Sensitivity – In this selection box, the sensitivity to human voice is defined, only for supervised mode.

Command: *376

6.4.1.4. CP Tone & Disconnect

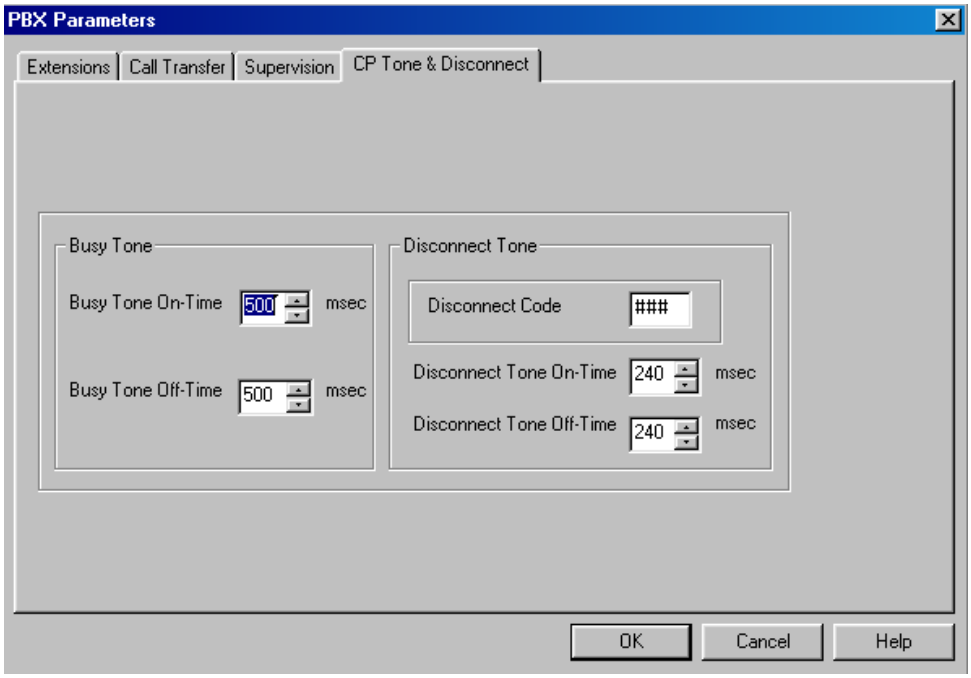


Figure 6-28: PBX Parameters Window – CP Tone & Disconnect Tab

Busy Tone – The "Busy on-time" and the "Busy off-time" determine the busy tone cadence. Busy tone is used for: a.) Detecting a busy extension when transferring a call in semi or supervised transfer mode and b.) Disconnecting the line when detecting a disconnect situation.

Command: *371

Disconnect Code – This defines the DTMF code sent from the PBX to the Voice Mail that instructs the Voice Mail to disconnect the line.

Command: *333

NOTE

This code is sent only to VM extensions.

Disconnect Tone – The disconnect on-time and off-time define the disconnect tone cadence. The disconnect tone usually appears when the caller hangs up. The Voice Mail will disconnect the line upon detecting this tone.

Command: *371

6.4.2. System Parameters

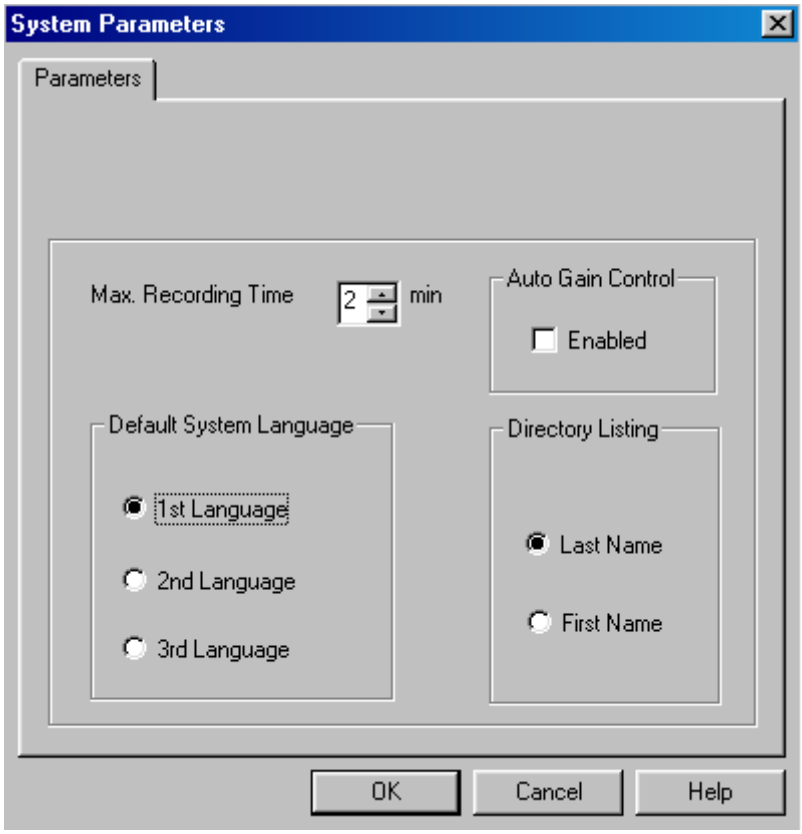


Figure 6-29: System Parameters Window

The System Parameters function in the Parameters menu defines a number of essential system related parameters.

Max. Recording Time – In this box the maximum recording time for the user messages, script messages, mailbox greetings and names are determined.

Command: *790

NOTE

Changing this parameter will affect on the operation mode of the Voice Mail.

Default System Language – The Voice Mail supports 3 languages simultaneously. Here is where system administrator determines which language, out of the 3 inserted in the Voice Mail, will be the default language for the system messages.

Command: *118

Auto Gain Control – When enabled, this adjusts the line volume so incoming calls will be recorded at the same level (messages, script messages & mailbox greetings).

Command: *377

Directory Listing – This is the "Dial By Name" feature for the caller in order to locate a mailbox owner from the Auto Attendant using first names or last names can do this.

Command: *011

6.4.3. In-Band DTMF Protocol

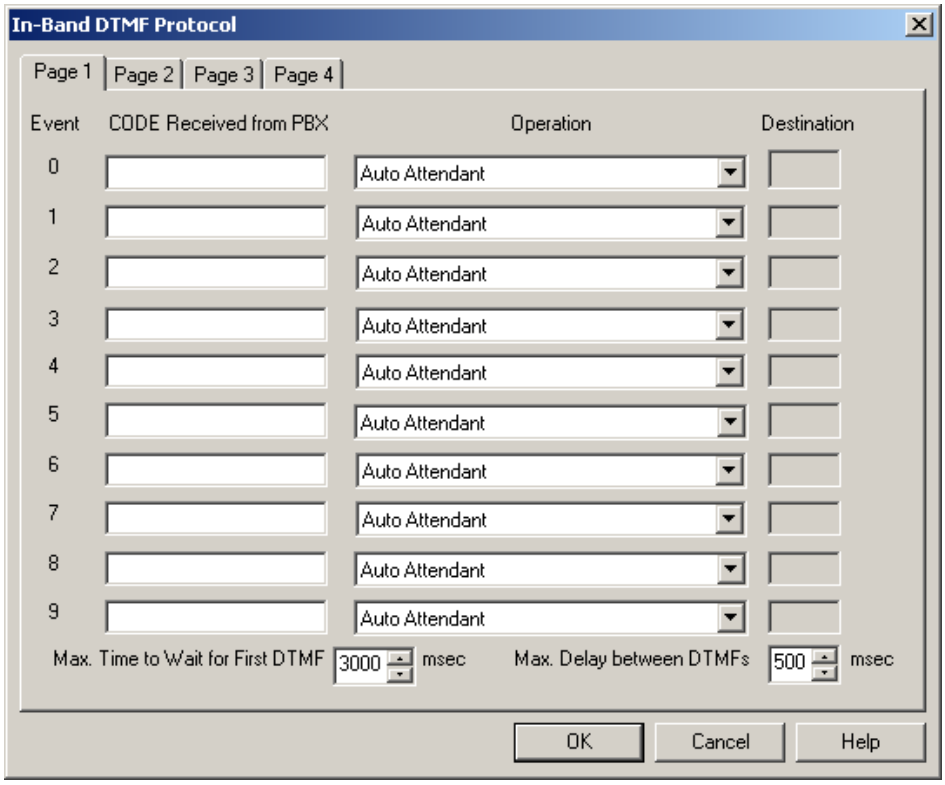


Figure 6-30: In-Band DTMF Protocol Window

The In-Band DTMF Protocol function in the Parameters menu provides four screens in which the PBX integration codes are defined.

Code Received from PBX – In this column we define the DTMF string that is sent from the PBX to the Voice Mail, (only if the PBX is In-Band DTMF protocol supported and Voice Mail extension is defined as a VM extension). There is an option to have up to 40 strings and for each string the operation should be defined.

Command: *200,201,202

Max. Time to Wait for DTMF – The maximum amount of time the Voice Mail must wait until is receives its first DTMF from the PBX.

Command: *210

Max. Delay Between DTMFs – The maximum amount of time is defined between each DTMF in the string sent by the PBX to the Voice Mail.

Command: *211

NOTE
If a DTMF is not heard within the allocated time, the opening greeting will be heard.

6.5. Auto-Attendant Menu

Figure 6-31: Auto-Attendant Menu

Via the Auto-Attendant menu, you can configure the Script Menus and Scheduling table.

6.5.1. Script Menu

The Script Menu function in the Auto-Attendant menu consists of a number of screens, which will be shown separately. A number of screens contain example information.

6.5.1.1. Script Programming

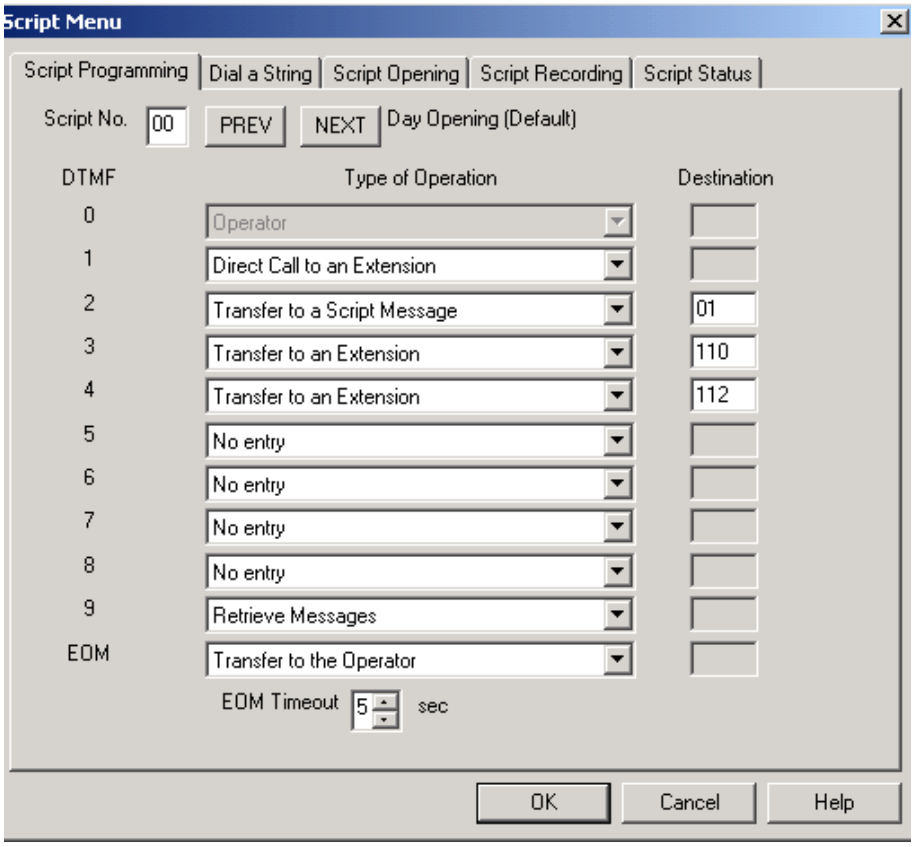


Figure 6-32: Script Menu Window – Script Programming Tab

In this screen you can define the operation for each DTMF and a view wide array of choices.

Script Number – In the box you define the Script number, which has to be edited.

EOM = End of Message – this is operation what will be done at the end of the message.

EOM Time Out – this is the amount of time before EOM operation will be done.

Type of Operation – The Type of Operation provides a drop-down menu, from which a number of options can be chosen. The choices are:

No entry
Transfer to a Script Message
Transfer to a Script Message + 1st Language
Transfer to a Script Message + 2nd Language
Transfer to a Script Message + 3rd Language
Directory List
Transfer to an Extension
Transfer to a Mailbox
Direct Call to an Extension
Direct Call to a Mailbox
Leave a Message
Retrieve Messages
Disconnect
Disconnect + Message
Return To the Main Menu
Dial a String

Transfer to a script message – This will transfer the caller to the sub-menu, which is defined in the destination. Command: *110
Transfer to a Script Message + 1st Language, 2nd Language or 3rd Language – This is an option to transfer to the sub menu defined in the destination and to change the language until the end of the session. Command: *117
Max. Delay Between DTMFs – The maximum amount of time is defined between each DTMF in the string sent by the PBX to the Voice Mail. Command: *211
Directory List – This is the ”Dial by name” feature. After pressing the DTMF for this option the Voice Mail will ask the caller to enter the 1st 3 letters of the first or last name of the required party. Each mailbox in the list has to define Directory list code and record the Name. Command: *111
Transfer to an Extension – When pressing the relevant DTMF for this option the call will be transferred to the number defined in the destination. Command: *120

NOTE
The number can be up to fur digits without any connection to the legal extension.

Transfer to a Mailbox – This is the option for the caller to dial the required mailbox by pressing the digit and the call will then be directly transferred to the mailbox and the personal greeting played. Command: *130
Direct Call to an Extension – The Voice Mail allows the caller to dial the required extension independently. The extension number must be defined as a legal extension in the PBX Parameters Command: *170
Direct Call to a Mailbox – The Voice Mail allows the caller to dial the required mailbox independently. Command: *175
Leave a Message – The option here is to leave a message in a specific mailbox from the Auto Attendant. After pressing on the relevant DTMF, the Voice Mail will ask for the mailbox number. Command: *150
Retrieve Messages – This is the DTMF key for the retrieving message process. After dialing this DTMF the Voice Mail will request the required mail box number and password and thereafter the “retrieve message” process begins. Command: *160
Disconnect – Simply disconnects without any announcement. Command: *140
Disconnect with Message – This is what’s known as a “polite” disconnect, the Voice Mail says “thank-you and good-bye” before disconnecting. Command: *140
Dial-a-String – In this case you need to enter the “String” number from the “Dial-a-String” table. This is a “Free DTMF string dialing” call in a blind transfer to perform special PBX applications (See the next table). The example screen in Figure 6-32 shows that we added the reactions to the DTMF numbers 1, 2, 3, 4, 9 and EOM. For the numbers 2, 3 and 4 we also added the destination. Dial a string feature required to use Hook flash code for to transfer a call.

6.5.1.2. Dial-a-String

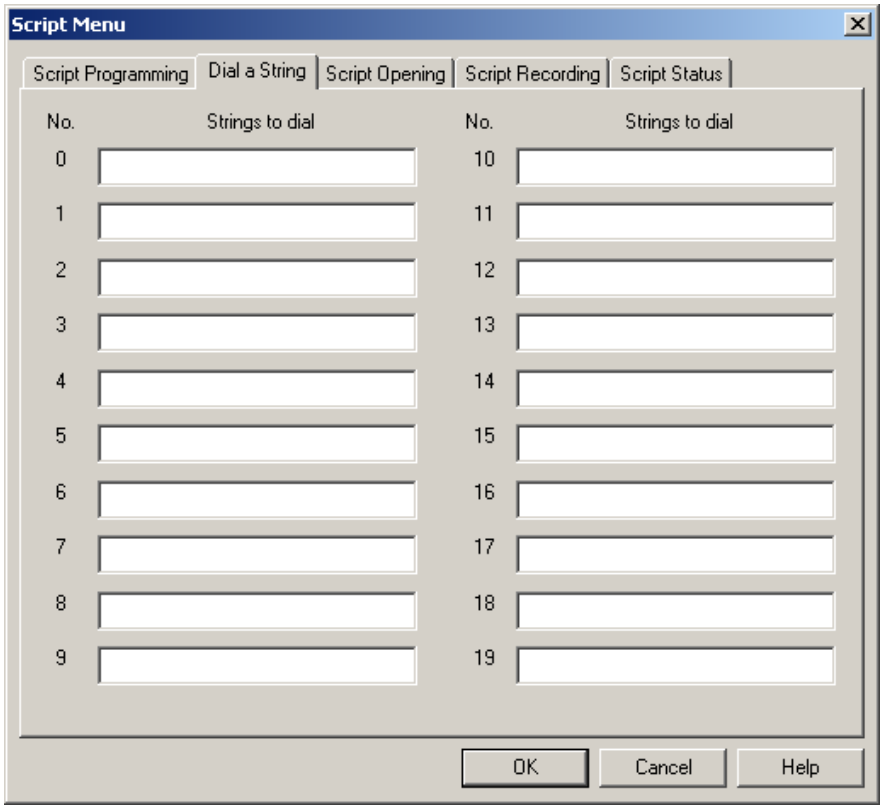


Figure 6-33: Script Menu Window – Dial a String Tab

In this screen you have to make definitions for the 20 DTMF strings to dial. A string can be up to 20 digit including A-D, 0-9, *, #, p for pause and & for Hook Flash.

In the example in Figure 6-33 the string starts with a hook flash (pick up the phone), a pause and than either a number for an outside line (with pause) and number or the number directly.

6.5.1.3. Script Opening

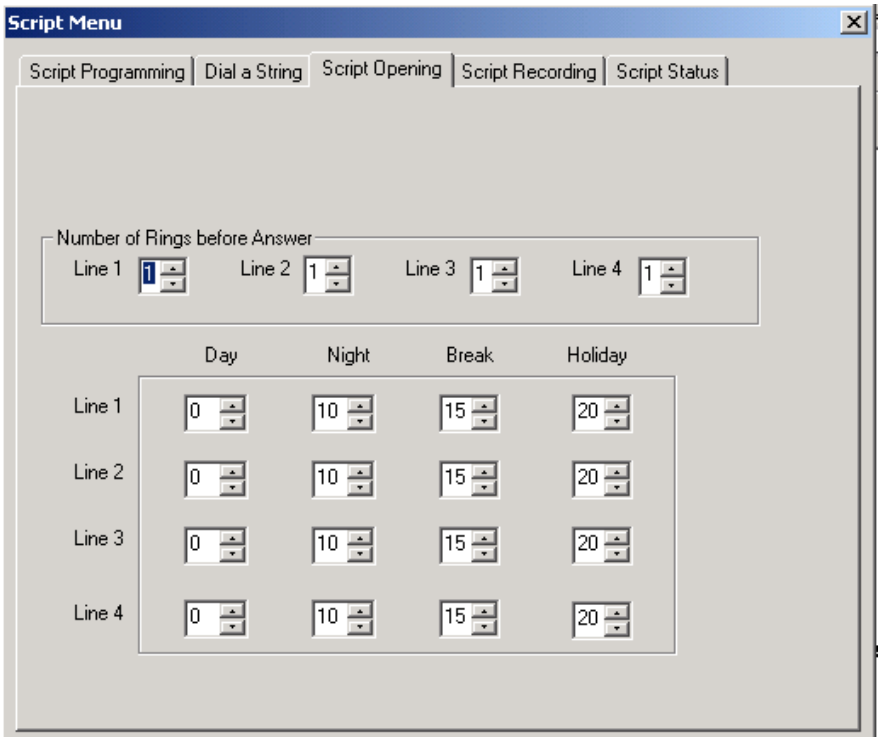


Figure 6-34: Script Menu Window – Script Opening Tab

In this screen the script opening parameters are defined. Line 1 and Line 2 are relevant for VoxBox Lite.

Number of Rings before Answer – The number of rings are defined before a call is answered on the respected line.

Command: *310

The Table – Defines which script to be played for each port (Script By Port).

Here you can separate two companies on one Voice Mail and define the opening greeting for each port. For each port there are four opening scripts defined according to the day, night, break and holiday modes.

Command: *112

6.5.1.4. Script Recording

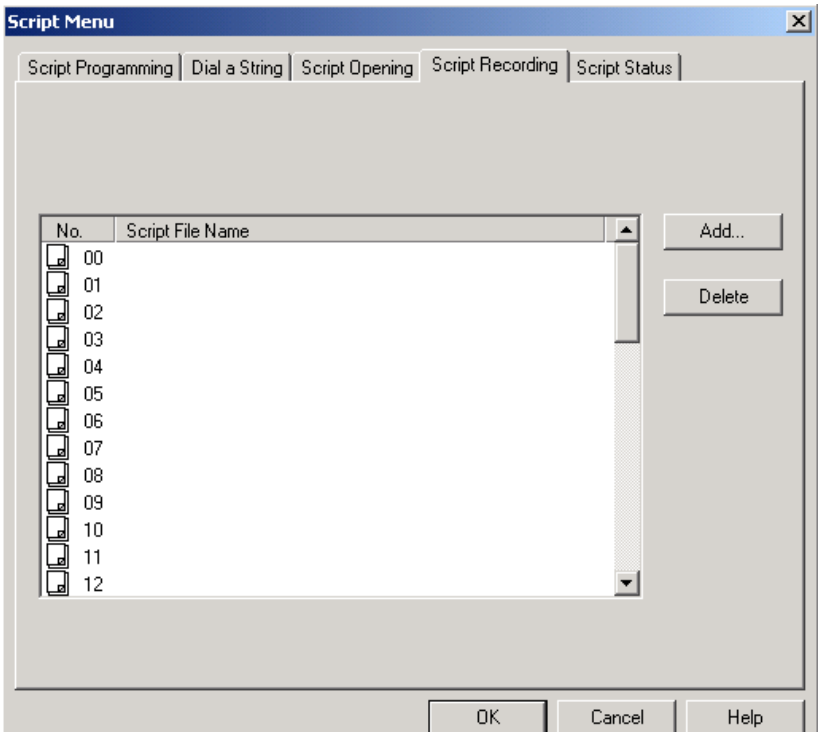


Figure 6-35: Script Menu Window – Script Recording Tab

In this screen you can define the Script Recordings (loaded and deleted).

6.5.1.5. Script Status

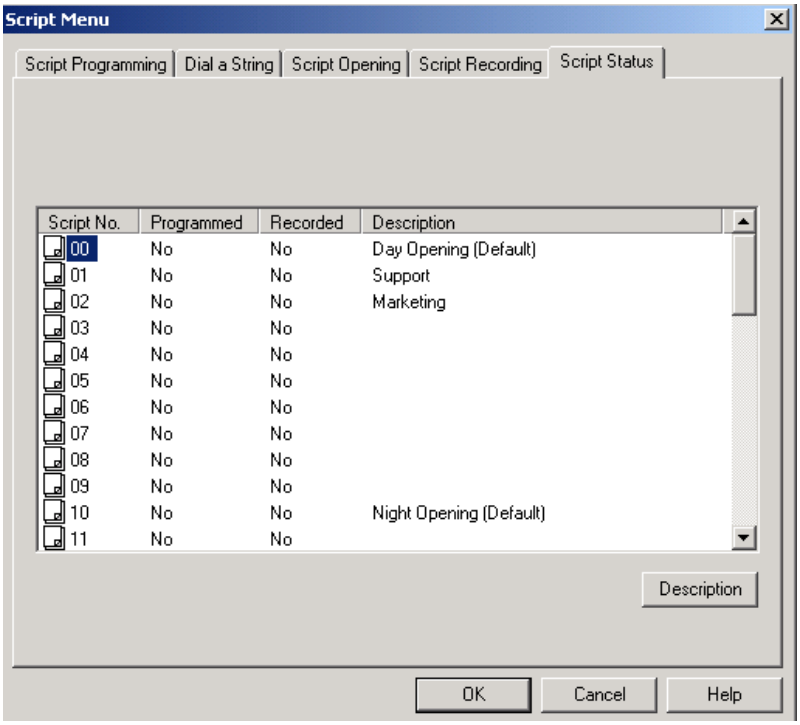


Figure 6-36: Script Menu Window – Script Status Tab

In this screen displays a list of all the scripts with their programming and recording status. For each script you can name the file for future reference. The icon of the script will change if the script is recorded. A number of scripts have been pre-defined. In the example we have added the Script for Support and Marketing.

6.5.2. Time, Date and Weekly Schedules

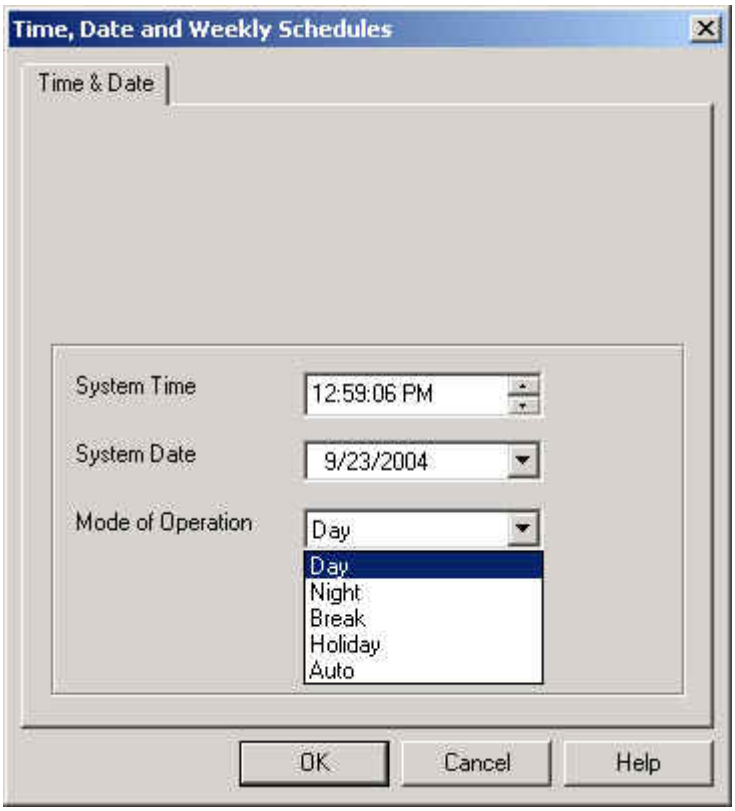


Figure 6-37: Time & Date Window

The time and date function in the Auto-Attendant menu provides the options to change the time, date and operation mode.

System Time and Date – current date and time, by default the Voice Mail takes the time and date from your PC. The system time will be shown after the Read parameters from the system, otherwise PC time will be shown here.

Command: *420**,***430

Mode of Operation – Defines the unit's mode of operation. The mode can be changed by DTMF code.

In Auto mode, the Voice Mail will automatically change from day to night to holiday and to break mode as programmed in the weekly schedule.

Command: *8, *400

6.5.2.1. Schedules

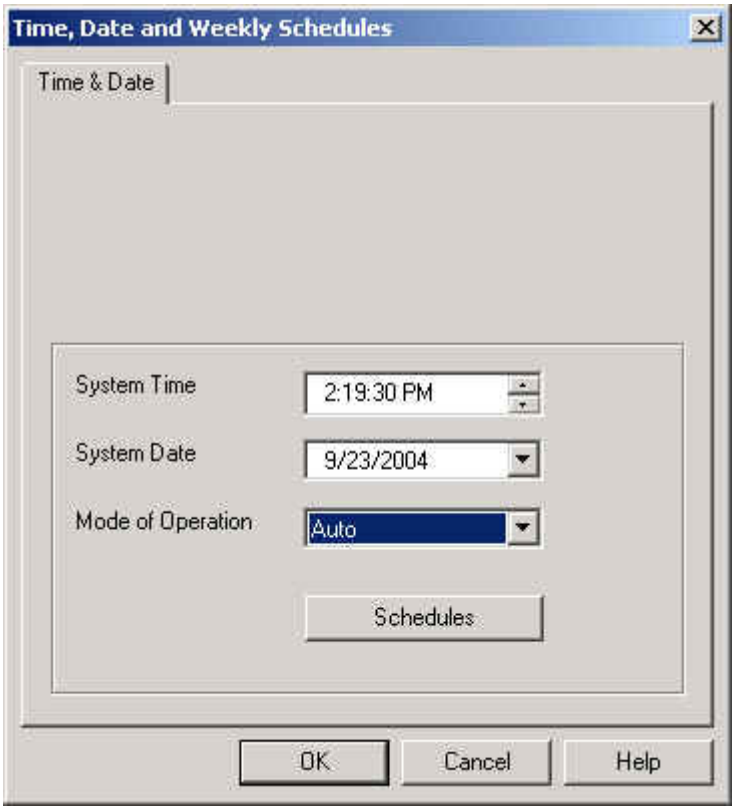


Figure 6-38: Time & Date Window

The schedules button on the time and date screen is available in the Auto Operation mode only.

NOTE

Automatic Mode – When the Voice Mail is programmed in Automatic mode, the weekly and holiday schedules must be programmed. Should you not do so, the Voice Mail will automatically play the opening greeting that was pre-programmed by the system clock. If a correspond script greeting is not recorded, system will be switched to the Manual Day mode automatically.

The Schedules screen contains two windows: Weekly Schedule and Holiday Schedules.

Weekly Schedule

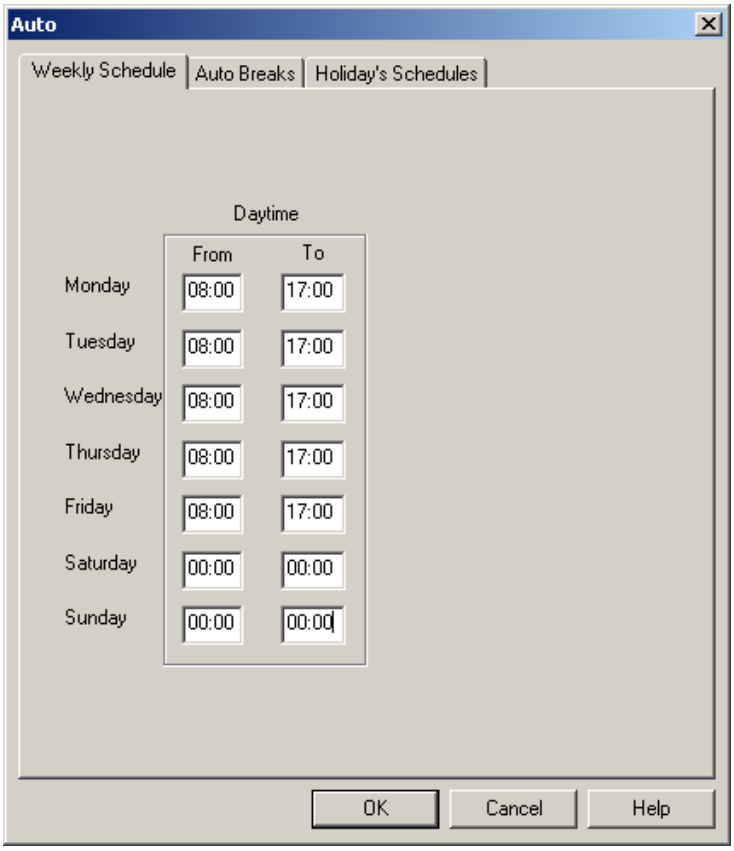


Figure 6-39: Auto Window – Weekly Schedule Tab

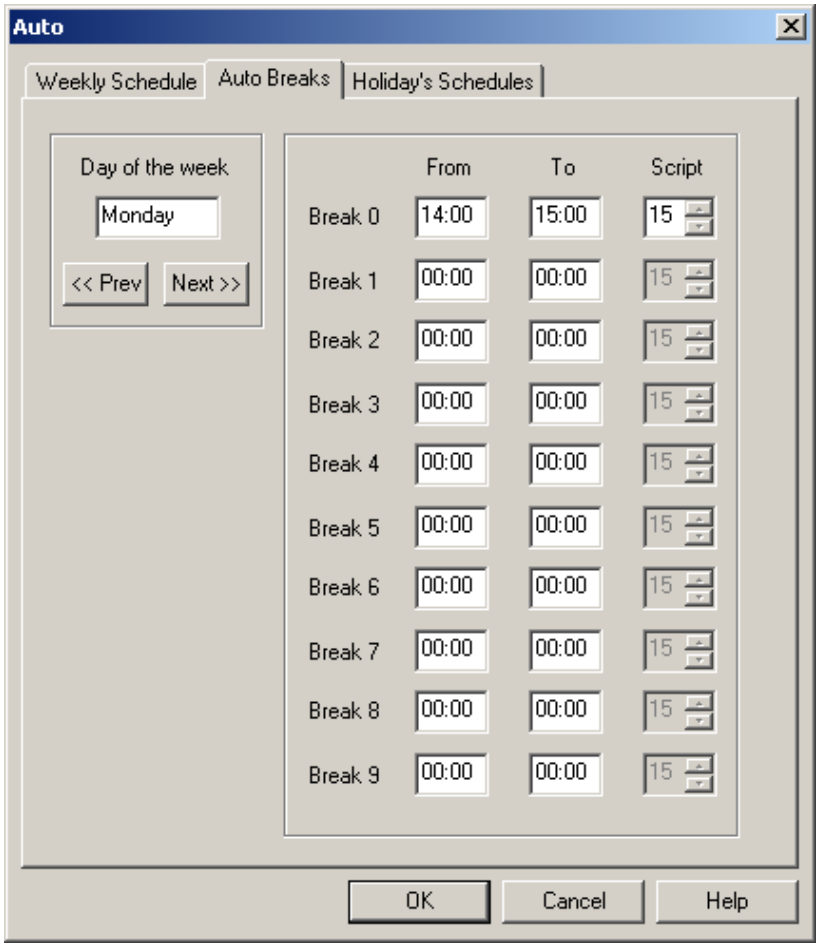


Figure 6-40: Auto Window – Auto Breaks Tab

Weekly Schedule – In above example the Weekly Schedule has been programmed as: on Monday from 8:00 to 14:00 the Voice Mail will play script message 00 (default day) and then from 14:00 to 15:00 script no 15 (default break), from 15:00 to 18:00 script 00, which is the day script again and then from 18:00 to 08:00 script 10 (default night).

Command: *450, *460

Holiday Schedules

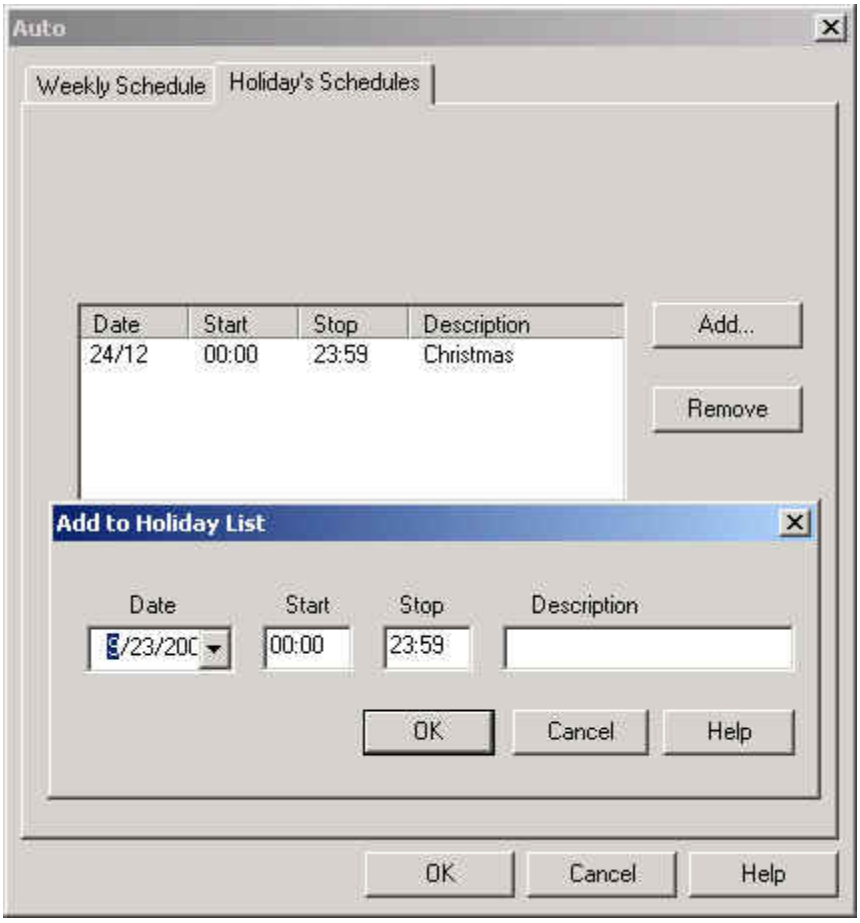


Figure 6-41: Auto Window – Holiday Schedules Tab

Holiday's Schedule – This list (up to 50) shows the dates that are defined as holidays. If the holiday lasts more than 1 day, each of the holiday days must be inserted separately.

Command: *470

NOTE

Pressing the add button adds a new holiday and pressing the remove button deletes the selected days.

The default is empty.

6.6. Voice Mail Menu

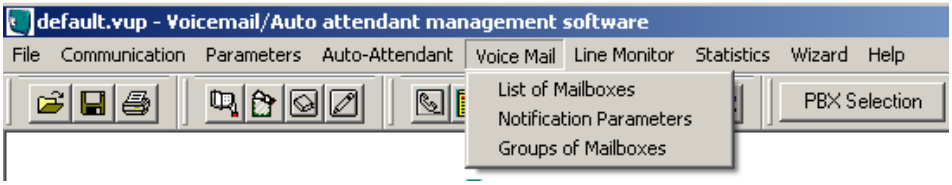


Figure 6-42: Voice Mail Menu

Via the **Voice Mail** menu you can configure the List of Mailboxes, Notification Parameters and Groups of Mailboxes.

6.6.1. List of Mailboxes

The **List of Mailboxes** function in the Voice Mail menu consists of two screens, in which you can define the individual and general mailbox parameters.

6.6.1.1. List

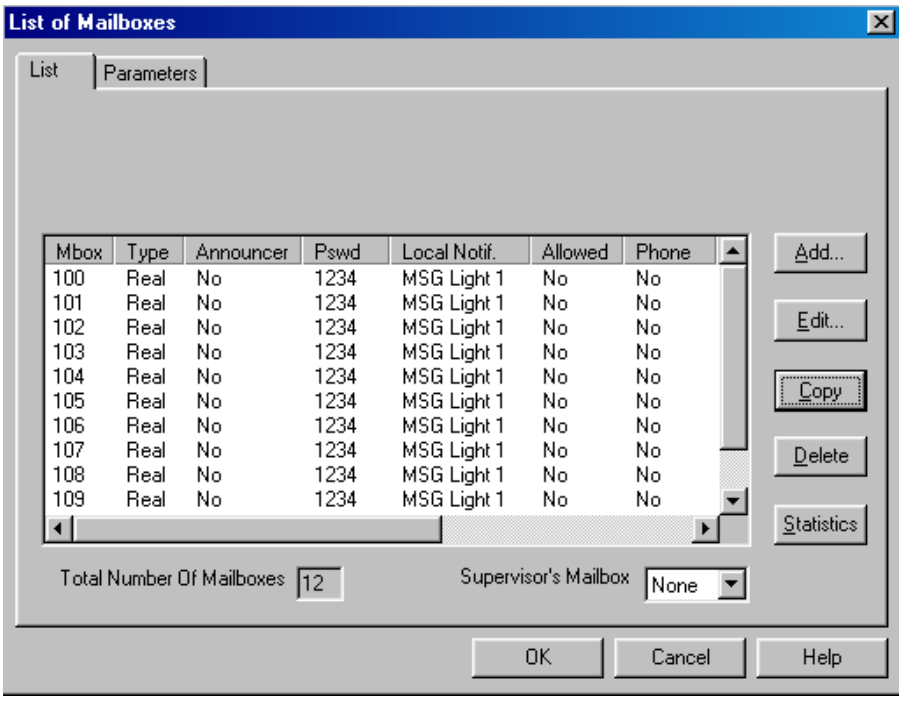

List of Mailboxes
List
Parameters
Mbox Type Announcer Pswd Local Notif. Allowed Phone
100 Real No 1234 MSG Light 1 No No
101 Real No 1234 MSG Light 1 No No
102 Real No 1234 MSG Light 1 No No
103 Real No 1234 MSG Light 1 No No
104 Real No 1234 MSG Light 1 No No
105 Real No 1234 MSG Light 1 No No
106 Real No 1234 MSG Light 1 No No
107 Real No 1234 MSG Light 1 No No
108 Real No 1234 MSG Light 1 No No
109 Real No 1234 MSG Light 1 No No
Add...
Edit...
Copy
Delete
Statistics
Total Number Of Mailboxes 12
Supervisor's Mailbox None
OK
Cancel
Help

Figure 6-43: List of Mailboxes Window – List Tab

The above list displays all the mailboxes defined in the Voice Mail and their configuration parameter values. You can add, edit, copy and delete values by clicking on the appropriate button in this screen. The description of the values is found in the following screen.

Supervisor Mailbox –define here the supervisor mailbox, which is used when the Voice Mail's memory is 85% full. This mailbox will get the alarm messages about memory usage.

Command: *360

Pressing the Add button (Command: *501)

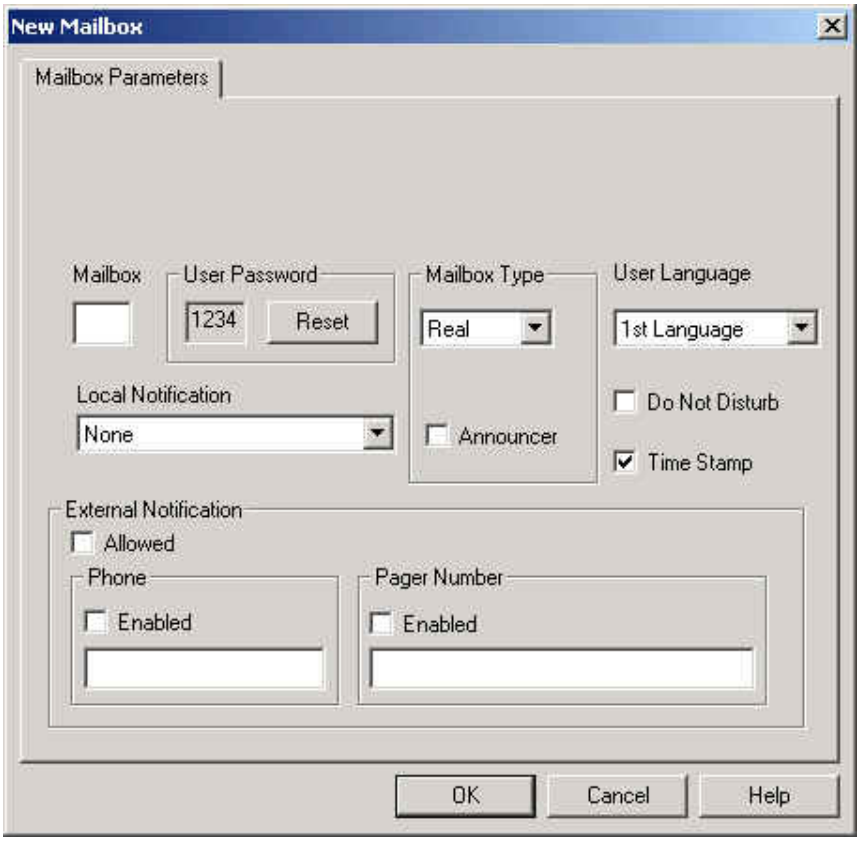


Figure 6-44: New Mailbox Window – Mailbox Parameters Tab

Mailbox – Enter the mailbox number that you want to open.
User Password – 1234 is the default. When the password has been changed to a "secret Password" will be shown ****. If will need to change the password back to the default password, this is where it is done.
Mailbox Type – There are two types of mailboxes: real and virtual. **Real Mailbox –** This is a mailbox where there is an extension and a telephone. **Virtual Mailbox –** This is a mailbox without an extension. It has all the same functions as a real mailbox, such as password protected. Command: *501 or *521
Announcer – Enables the Voice Mail to play a personal greeting (announcement), but does not allow messages to be recorded. Command: *502
User Language – Select the language to be heard on your mailbox menu by selecting one language from the three languages that have been chosen for the Voice Mail. Command: *533

NOTE

After transferring a call in non-supervised mode using in band DTMF integration, the Busy, No Answer and Do not Disturb menu is played with the language defined here.

Do Not Disturb – When this is enabled, the Voice Mail will not transfer any calls from the Auto-Attendant to this extension. The Do Not Disturb menu will be played instead.

Time Stamp – This is the option for the Voice Mail to play or not to play the time and date of the message.

Command: *531

Local Notification – Notification can be performed as local or external. The possible types of local notification are as follows:

Message Light 1 – The Voice Mail sends the code that is defined in Notification codes to turn on the light on the telephone or to change the dial tone of the extension.

Message Light 2 – This is the same as message light 1. This option is used with certain PBXs that support more than 1 type of terminal.

Sign Ring – The unit rings the extension number periodically as defined by the “ring notification interval”, until all new messages have been heard or the maximum number of notification retries is reached.

Rings – The Voice Mail rings the extension number for a period of time, as defined in the “ring notification duration” and the “ring notification retries”. After the call is answered the unit prompts a menu that allows the user to retrieve messages.

Command: *700

External Notification – The system administrator allows remote telephone and pager notifications for each mailbox. Using the menu the owner can enable the remote notification status and enter a desired external telephone or pager number. If remote notification is allowed and enabled and a message is recorded, the Voice Mail dials the remote telephone number to notify the mailbox owner of new messages. After the mailbox owner enters the correct password, the unit plays the recorded message. When a remote pager is used the Voice Mail dials the number to notify the mailbox owner to call back and to check his/her mailbox. (No recorded message is played)

The Voice Mail stops sending ring notification after the mailbox owner has retrieved all messages or the defined number of notification retries has been exceeded.

Command: *710, *711

6.6.1.2. Parameters

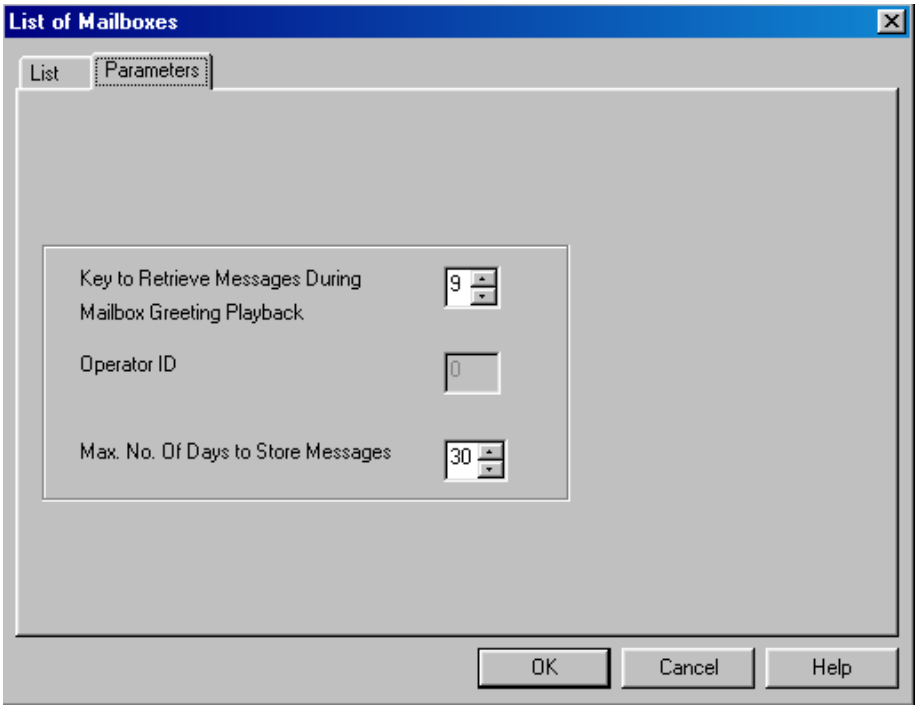


Figure 6-45: List of Mailboxes Window – Parameters Tab

Key to Retrieve Messages during Mailbox Greeting – This is the key that will be pressed during a personal greeting to enter to the mailbox menu for retrieve messages, i.e. if you want to retrieve a message from your mobile, dial your extension and when your personal greeting is played, press the defined key and the Voice Mail will then ask for password before playing the messages.

Maximum Number of Days to Store Messages – This parameter defines the number of days that messages are stored in a mailbox. After reaching the defined message limit, the messages are automatically deleted.

6.6.2. Notification Parameters

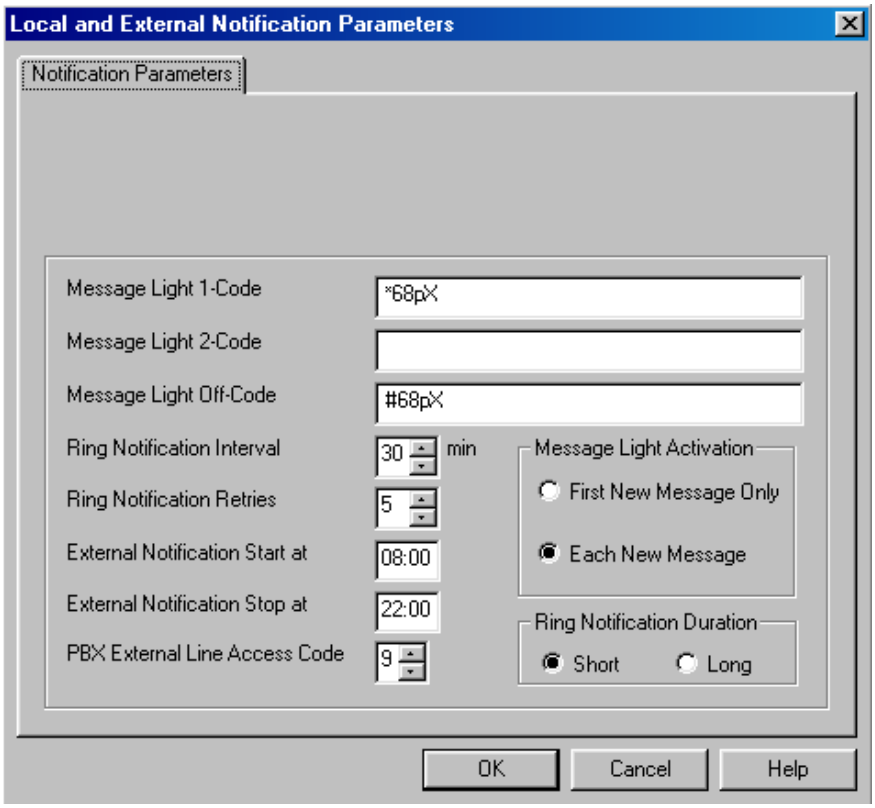


Figure 6-46: Notification Parameters Window

The Notification Parameters function in the Voice Mail menu contains a number of editable notification parameter.

Message Light 1-Code, Message Light 2-Code and Message Light Off-Code – The Voice Mail will dial the above codes always from port 2 and the legal entries are:

X = extension
P = pause
Q= 4 second pause (For External notification only!)
& = hook flash
! = send number of new messages to LCD station (only if the PBX support it)
DTMF = 0-9 , *,#,A-D

Message Light Off – The signal is used to turn off the message notification on the terminal. Some PBXs do not support this code so they turn off the notification LED after the Voice Mail is called.

Ring Notification Interval – This parameter defines how often the mail owner is notified of new messages by ring notification.

Ring Notification Retries – This parameter defines how many times the Voice Mail will try and notify the user of received messages.

External Notification Start/Stop – Sets the time for external notification.

PBX External Line Access Code – This is the key pressed by the Voice Mail to get an external line for external notification. External access code can be 1-4 digits.

Message Light Activation – Defines if lights up for every message or only after the first new message.

Ring Notification Duration – The amount of time the Voice Mail opens a line and tries to notify the caller of new messages in the ring notification process.

In the above example *68 is the message light code for a specific PBX. P is pause and the X stands for a specific extension.

6.6.3. Groups of Mailboxes

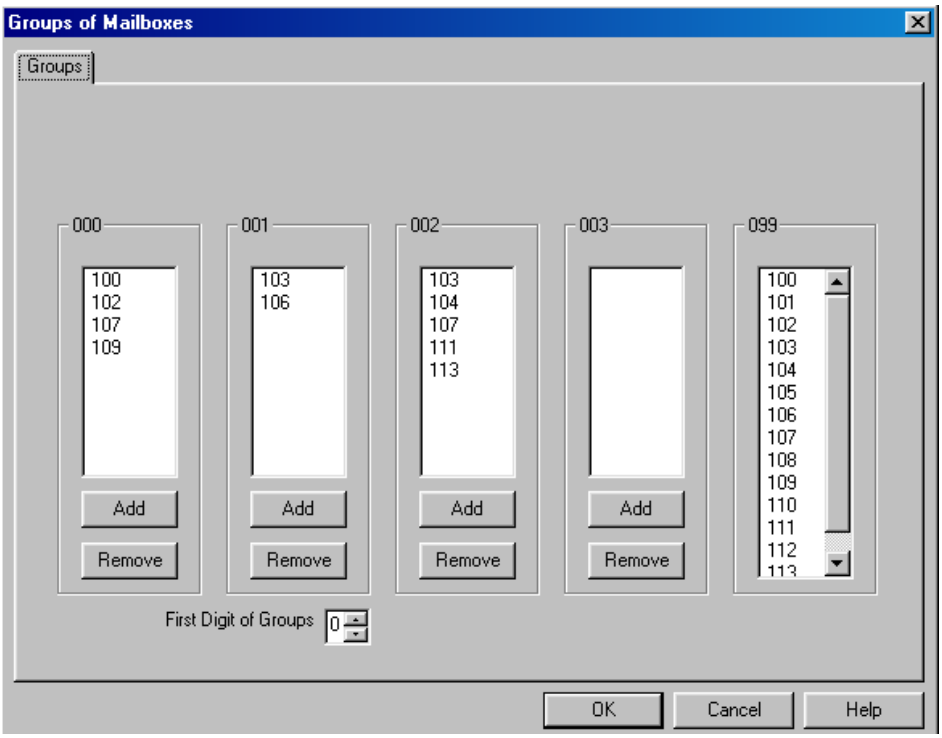


Figure 6-47: Notification Parameters Window

The Groups of Mailboxes function in the Voice Mail menu consists of a number of columns, in which groups can be created. The example screen above contains a number of groups.

Group List – Up to four mailboxes can be defined. The mailboxes that are defined within a group can be addressed simultaneously by dialing the group number. In order to add a mailbox to a group, select the required mailbox from the group of all mailboxes ending with the digits 099 and press on the “Add” button of the respective group. The group 099 is a list of all the mailboxes defined in the system.

NOTE

Each group can contain up to 20 mailboxes (excluding the group for all mailboxes).

First Digit of Groups – This parameter defines the digit that the mailbox groups start with. If a mailbox and a group of mailboxes have been defined with the same number, the messages will be sent to a mailbox and not to the group.

6.7. Line Monitor Menu

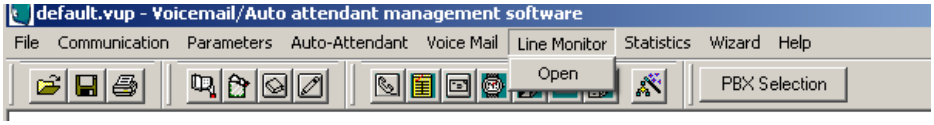


Figure 6-48: Notification Parameters Window

Via the Line Monitor menu you can activate the Line Monitor tool. The tool shows online all incoming DTMF signals, simultaneously from all ports via the RS-232 cable.

6.7.1. Activate the Line Monitor

➢ To activate the line monitor:

1. Connect the RS- 232 cable, one end to the PC and the other end to the Voice Mail.
2. Open the Line Monitor window (Figure 6-49).
3. Click the start button. All DTMF signals are displayed online.

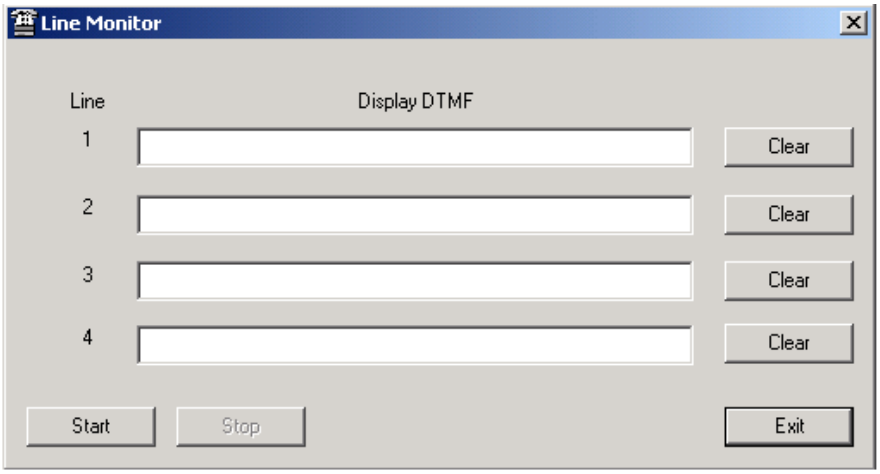


Figure 6-49: Line Monitor Window

6.8. Statistics Menu

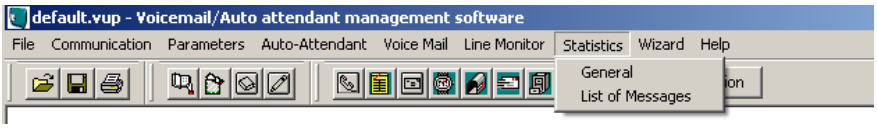


Figure 6-50: Statistics Menu

The Statistics menu provides the general statistics related to the unit and a List of Messages and Statistics per mailbox.

6.8.1. General

NOTE

Each group can contain up to 20 mailboxes (excluding the group for all mailboxes).

To receive the most accurate information, perform **Communication→Read Parameters** before opening the General Statistics.

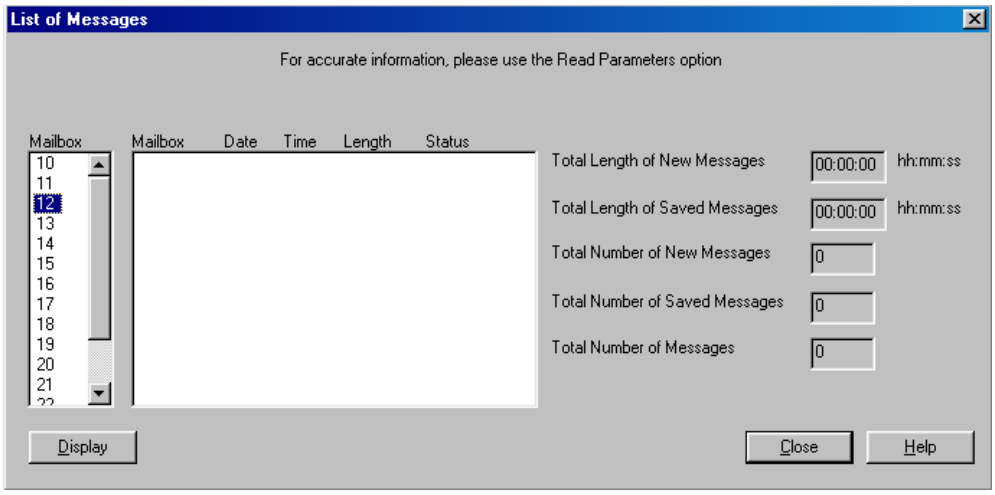


Figure 6-51: List of Messages Window

After reading the parameters, the above screen will contain the available list of mailboxes. When clicking on a specific mailbox, the following information will be displayed:

- All messages for that specific mailbox
- Date per message
- Time per message
- Length per message
- Status per message
- Total length of new messages
- Total length of saved messages
- Total number of new messages
- Total number of saved messages

- Total number of messages.

6.9. Wizard Menu

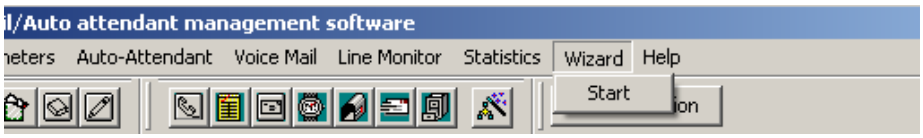


Figure 6-52: Wizard Menu

Selecting **Wizard→Start** will activate the Wizard, which will to guide you step-by-step through the integration process.

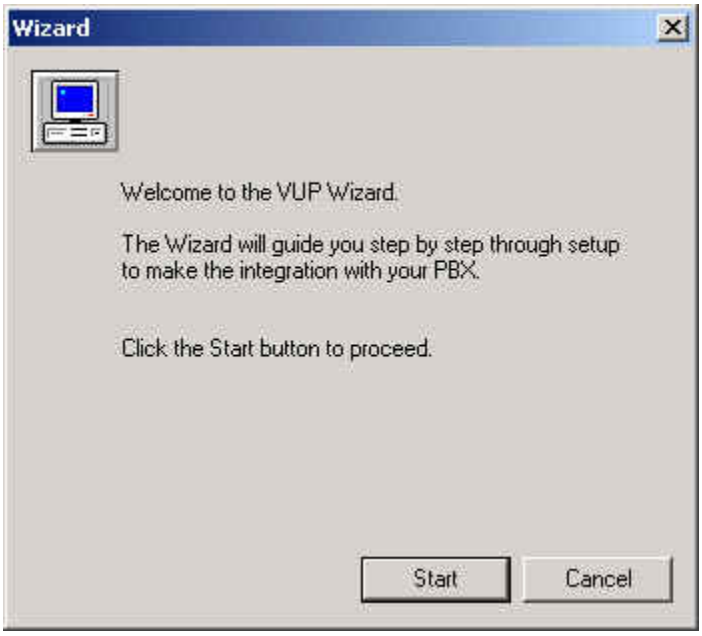

Wizard
Welcome to the VUP Wizard.
The Wizard will guide you step by step through setup to make the integration with your PBX.
Click the Start button to proceed.
Start
Cancel

Figure 6-53: Wizard Window

6.10. Help Menu

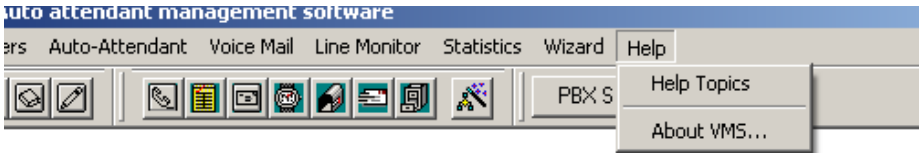


Figure 6-54: Help Menu

The Help Topics function in the Help menu will provide you a list of topics for which help is available.

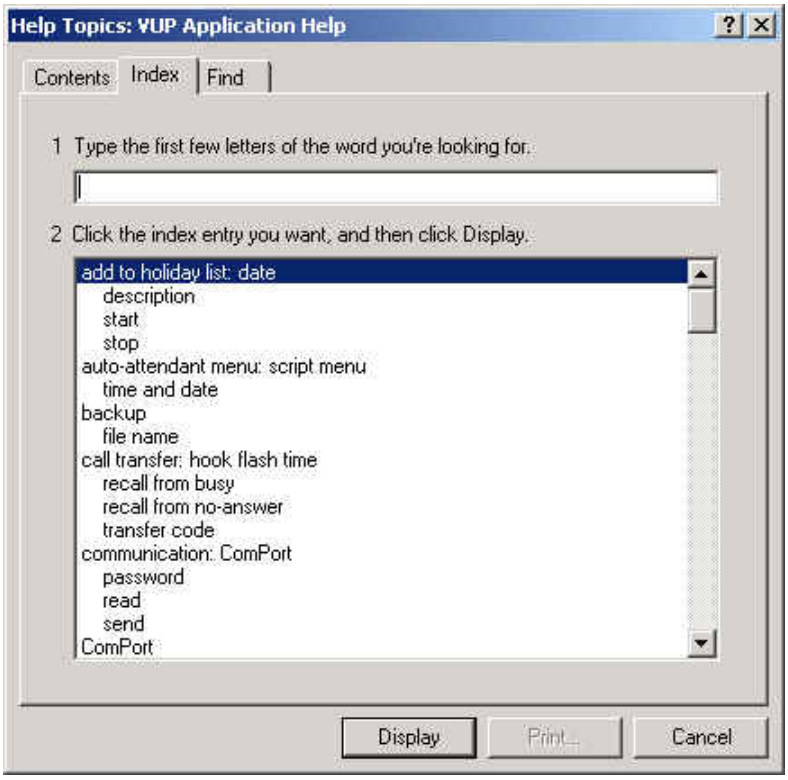


Figure 6-55: Help Topics Window

Chapter 7: User Operation Instructions

7.1. General

The following paragraphs describe the user operational menus.

7.2. User's Main Menu

Users can enter their mailbox menus for retrieving messages and set up their mailboxes in three ways:

- Through the auto attendant using access digits for the retrieve message process (*160)
- By pressing an access digit during the mailbox greeting
- By dialing the voice mail extension and if the PBX supports in-band DTMF protocol the users will automatically enter their mailbox menus.

If a user wants to retrieve messages from another extension, it is possible to dial "Mailbox password backup out key" DTMF "#" during system requirement to enter the mailbox's password and the call will be forwarded to the Main Company Greeting. Then the unit announces the number of messages and plays the users menu:

Digit	Name	Description
1	Retrieve Message	Listen to Messages
2	Mailbox Parameters	Enter Mailbox Parameters Menu
8	Send Message	Send a Message to a Specific Mailbox
9	Return to Auto Attendant	Exit Current Menu and Return to Auto Attendant

NOTE

The User's main menu can also be entered by dialing the programmed "Key to retrieve messages" during the mailbox greeting playback. This parameter is programmed via command *331 or from the VMS (the default digit is 9).

7.3. Retrieve Message Menu

If the mailbox owner dials “1” while in user’s main menu, the unit plays the new messages, followed by previously saved messages. At the end of each message, the unit plays the Retrieve Message menu:

Digit	Name	Description
1	Next Message	Play next message
2	Replay	Replay current message
3	Save	Save current message
4	Forward	Forward current message to another mailbox
5	Reply	Reply to message sender (internal messages only)
8	Delete	Delete current message
9	Return to Previous Menu	Return to previous menu (user’s main menu)
0	Pause	Mailbox owners can pause the playback of the mailbox messages for a maximum of 50 seconds

7.4. Mailbox Parameters

If the mailbox owner dials “2” while in user’s main menu, the unit plays the user’s Parameters menu:

Digit	Name	Description
1	Record Greeting	Record a greeting message for the mailbox
2	Record Name	Record your name
3	Directory Listing	Set directory listing parameters
4	Change Password	Change the mailbox access password
5	DND	DND enable/disable
6	External Notification	Set the external notification parameters (if allowed)
7	Pager Notification	Set the pager notification parameters (if allowed)
9	Return to Previous Menu	Return to previous menu (User’s main menu)

7.4.1. Record Greeting

The mailbox owner can record a personal greeting by dialing “1” on the user’s parameters menu (see Paragraph 7.4). The unit then plays the Record Greeting menu:

Digit	Name	Description
1	Play Back	Play existing recording
2	Record	Record a new greeting message
8	Delete	Delete existing message
9	Return to Previous Menu	Return to previous menu (user’s parameters menu)

To record a greeting message for a mailbox group, enter the mailbox group number as the mailbox number. The above menu will be played and a message may be recorded or altered.

7.4.2. Record Name

The mailbox owner can record his personal name by dialing “2” on the user’s parameters menu (see Paragraph 7.4). The unit then plays the Record Name menu:

Digit	Name	Description
1	Play Back	Play existing recording
2	Record	Record a new name
8	Delete	Delete existing name
9	Return to Previous Menu	Return to previous menu (User’s parameters menu)

7.4.3. Directory Listing

The mailbox owner can set the directory listing parameters by dialing “3” on the user’s parameters menu (see Paragraph 7.4). The unit then plays the Directory Listing menu:

Digit	Name	Description
1	Play Back	Play current directory listing code
2	Change	Change directory listing code
8	Delete	Delete Directory listing code
9	Return to Previous Menu	Return to previous menu (user’s parameters menu)

7.4.4. Change Password

A mailbox password consists of four digits. The default password is 1234. To disable the password, enter “0000”.

The mailbox owner can change his password by dialing “4” on the user’s parameters menu (see Paragraph 7.4), dialing “2” (for the change password option) and then dialing the new password. Use digits 0-9 only when entering a password.

The System Administrator can reset the mailbox password to the default password by using code *570 or using the VMS.

Digit	Name	Description
1	Play Back	Play the current password
2	Change	Change existing password
9	Return to Previous Menu	Return to previous menu (User’s parameters menu)

7.4.5. Do Not Disturb (DND)

The mailbox owner can dial “5” on the user’s parameters menu (see Paragraph 7.4) to change to the Do Not Disturb mode. The unit announces the selected mode every time the mailbox owner changes the mode.

When a caller dials an extension in Do Not Disturb mode, the unit plays one of the following messages:

- By default, system message 121
- If recorded, script message 25 in the first language
- If recorded, script message 35 in the second language
- If recorded, script message 45 in the third language

NOTE

Extension corresponds to the mailbox, which is in the DND mode will be unavailable to get calls from the Auto Attendant.

7.4.6. External Notification

For activating the external notification of a mailbox, the System Administrator must enable this feature for the mailbox, thereafter, the mailbox owner can:

- Enable/disable remote notification
- Enter his remote telephone number
- Listen to the current remote telephone number by dialing “6” on the user’s parameters menu (see Paragraph 7.4).

Digit	Name	Description
1	Change Mode	Toggles the external notification state (Enable/Disable)
2	Telephone Number	Enter the selected telephone number for external notification. Codes1 0-9, Extension Number, *, #, A-D, P and Q can be used
3	Play Back	Play back the external telephone number
9	Return to Previous Menu	Return to previous menu (user’s parameters menu)

Codes[1]:

P (1 second pause) = *1	# = *4	B = *6	D = *8	* = **
Q (4 second pause) = *2	A = *5	C = *7	0-9 = 0-9	

7.4.7. Pager Notification

For activating the external notification of a mailbox, the System Administrator must enable this feature for the mailbox, thereafter, the mailbox owner can:

- Enable/disable pager notification
- Enter his pager number
- Listen to the current pager number by dialing “7” on the user’s parameters menu (see Paragraph 7.4).

Digit	Name	Description
1	Change Mode	Toggles the pager notification state (Enable/Disable)
2	Pager Number	Enter the selected pager number for pager notification. Codes1 0-9, Extension Number, *, #, A-D, P and Q can be used
3	Play Back	Play back the pager number
9	Return to Previous Menu	Return to previous menu (user’s parameters menu)

Codes[1]:

P (1 second pause) = *1	# = *4	B = *6	D = *8	* = **
Q (4 second pause) = *2	A = *5	C = *7	Ext. No. = *0	0-9 = 0-9
CPD Tone = *3				

7.4.8. Return to Previous Menu

The mailbox owner can dial “9” on the user’s parameters menu (see Paragraph 7.4) to return to the User’s main menu (see Paragraph 7.2).

7.5. Send Message

The mailbox owner can leave a message in any mailbox or group of mailboxes by dialing “8” on the user’s main menu (see Paragraph 7.4).

7.6. Return to Auto Attendant

The mailbox owner can dial “9” on the user’s main menu (see Paragraph 7.2) to return to the auto attendant.

7.7. Quick Reference Guide

Figure 7-1 displays a quick reference guide for user ‘s operation.

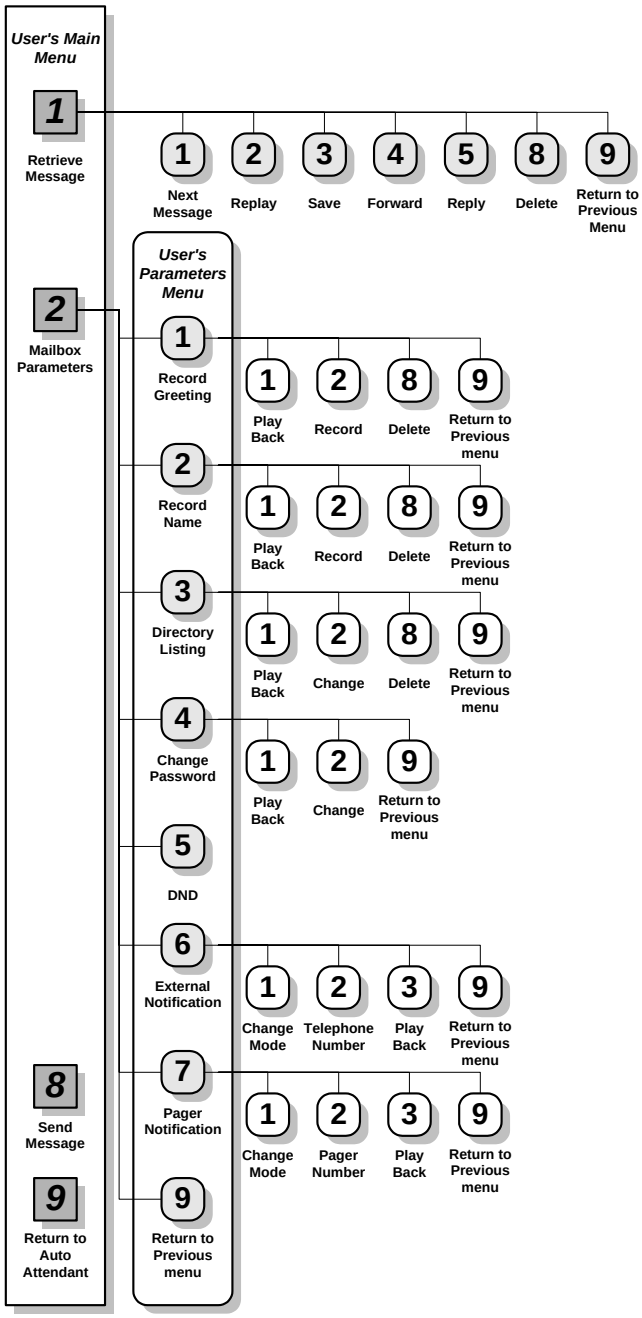


Figure 7-1: Quick Reference Guide

Chapter 8: Programming the In-Band DTMF Protocol

8.1. General

This chapter describes how to program the unit to detect In-Band DTMF codes sent by your PBX and to take appropriate action upon detection.

When the In-Band DTMF Protocol feature is programmed, the unit waits a defined period of time for an In-Band DTMF code after answering a call from the PBX. If the unit detects the code within the defined period of time, it performs a predefined operation. If the unit does not detect the code, it plays the Automated Attendant's Opening Greeting.

After answering a call from your PBX, the unit plays the Automated Attendant's Opening Greeting under the following conditions:

- The DTMF codes received from the PBX do not exactly match the programmed In-Band DTMF codes.
- The specified extension number (Target) called does not have a valid mailbox.
- The first DTMF character of the In-Band DTMF code was received after the specified period of time.
- The following DTMF characters were received outside the specified time frame

If an In-Band DTMF table is empty but incoming DTMF string includes an asterisk (*) sign, the system will disconnect immediately.

You can program In-Band DTMF codes for up to ten events by:

- Touch tone telephone
- Computer running the Voice Mail Maintenance Software (VMS)

8.2. Programming the Unit by Telephone

The following sections present the command codes used to program the unit to detect and act on In-Band DTMF codes sent by your PBX.

8.2.1. Defining an In-Band DTMF Code for an Event

To define an In-Band DTMF code for an event, dial:

*200 + XX + YY...YY + #

XX = Event number (00-39)

YY...YY = In-Band DTMF code sent by the PBX

Each DTMF code can contain up to twenty characters, including 0-9, A-D, *, #, source and target. You can also include the following two wild cards to bypass DTMF characters sent by your PBX and not relevant to the unit operation:

- Ignore + Length (*9 + two digit number). For example, wild card *906 programs the unit to ignore the next six DTMF characters received.
- Ignore + Separator (*0 + one digit character). For example, wild card *05 programs the unit to ignore all DTMF characters until it receives a 5. Wild card *0*4 programs the unit to ignore all DTMF characters until it receives a #.

NOTE
In the above examples 5 and # are also ignored.

Table 8-1: Entering an In-Band DTMF Code Using a Telephone

DTMF Character	Number to Dial
Digits 0-9	0-9
*	**
#	*4
A	*5
B	*6
C	*7
D	*8
Ignore + Length	*9 + XX where XX is the number of DTMF characters to ignore
Ignore + Separator	*0 + X where X is the DTMF character (0-9, *, #, A-D) used as a separator
Source	*1, indicates the caller's number (not currently available)
Target	*2, indicates called extension number Dial *2 for each digit in the extension. For example, if your PBX is configured to support a 3-digit extension, dial *2 three times.

8.2.2. Selecting an Operation Type

You can program each event to perform an operation. To select an operation type, enter:

*201 + XX + YY

XX indicates the event number (00-39)

Y indicates the operation to be performed by the unit according to the following options:

00 = Play the Automated Attendant's Opening Script

01 = Leave a message in a designated mailbox

02 = Retrieve messages from a designated mailbox

03 = Play a specific script[1]

04 = Play the busy menu

05 = Play the No-Answer menu

06 = Play the Do Not Disturb menu

07 = Disconnect the call

08 = Record the conversation

09 = Play a specific script and change to 1st language[1]

10 = Play a specific script and change to 2nd language[1]

11 = Play a specific script and change to 3rd language[1]

12 = Play the Directory Listing (DBN)

13 = Transfer to a mailbox[1]

14 = Transfer to an extension[1]

15 = Transfer to the operator

[1]= A destination must be defined for these tasks. The destination of these operations is determined through code *202.

8.2.3. Selecting a destination

If you have programmed an event to play a script, transfer to an extension, or a mailbox dial the following command code to define the destination:

*202 + XX + YYYY + #

XX indicates the event number (00-39)

YYYY indicates the script number, an extension number or a mailbox number

NOTE

Make sure the script message has been recorded if transferring to a script.

8.2.4. Defining the Time to Wait for the First DTMF Character

You can define the time period the unit must wait between answering a call and receipt of the first character of an In-Band DTMF code. If the unit does not detect a DTMF character within the defined period of time, it automatically plays the Automated Attendant's opening greeting.

To define the timeout until the first DTMF character, dial:

*210 + XXXX

Where

XXXX = 0000-9980 ms in steps of 20 ms (the default is 3 seconds).

8.2.5. Defining the Time to Wait Between DTMF Characters

You can define the amount of time the unit must wait between receipts of each DTMF character comprising an In-Band DTMF code. If a DTMF character is not detected within the defined period of time and the In-Band DTMF code has not been completed, the unit automatically plays the Automated Attendant's opening greeting.

To define the amount of time to wait between DTMF characters, dial:

*211 + XXX

Where

XXX = 000-980 ms in steps of 20 ms (The default is 500 ms).

8.2.6. MATRA PBX Support

The unit can support the Q23 Protocol. To activated the support in Q23:

Enter to programming mode and dial:

*204 + X

Where

X=1, unit support

X=0, unit not support

8.3. Sample Programming

8.3.1. Working with the SIEMENS Hicom 150E Office PBX

By default, the SIEMENS Hicom 150E Office PBX uses the following DTMF characters for integration with the unit:

***1 ** Source *1	Internal call to Voice Mail
***2 02222 *1	To activate the Automated Attendant (external call)
***3 ** Source Target *1	Call forward all (leave a message)
***4** Source Target *1	Call forward after no answer
***7** Source Target *1	Call forward after busy

NOTE

All source and target extension numbers in the Siemens Hicom 150E Office PBX system have three digits.

8.3.1.1. Programming Using a DTMF Telephone

- **To program the unit to detect an In-Band DTMF code from the PBX and enable an internal caller to retrieve messages from a mailbox (***1 ** Source *1):**

  Dial | *200 00 ** ** ** 1 ** ** *2*2*2 ** 1 # |

  *200 is the programming code to define an In-Band DTMF code

  00 is the event number assigned by you to the In-Band DTMF code

  Each * in the above PBX DTMF code is replaced by **

  *2*2*2 indicates the 3-digit extension number (Since the extension is calling its mailbox, target is used instead of source)

  # indicates the end of the In-Band DTMF code.

Dial *****201 00 02

*201 is the programming code to select an operation

00 is the event number 02 is the unit's operation type that indicates retrieving messages from a mailbox.

- **To program the unit to detect an In-Band DTMF code from the PBX and enable an internal caller to leave a message in a mailbox (***3 *** Source Target *1):**

Dial *200 02 ** ** ** 3 *905 *2*2*2 ** 1 #

*200 is the programming code to define an In-Band DTMF code

02 is the event number assigned by you to the In-Band DTMF code

Each * in the above PBX DTMF code is replaced by **

*905 is a wild card programming the unit to ignore 5 DTMF characters (*** Source)

*2*2 *2indicates the 3-digit target extension number

# Indicates the end of the In-Band DTMF code

Dial *201 02 01

*201 is the programming code to select an operation

02 is the event number

01 is the unit's operation type that indicates leaving a message in a mailbox.

Chapter 9: Troubleshooting

9.1. General

This chapter presents answers to commonly asked questions on operating the unit. If problems persist, contact your dealer.

9.2. Troubleshooting Guide

Symptom:	Local notification does not work.
Solution:	Make sure you have entered the correct notification codes.
	Make sure that local notification is enabled.
	Make sure that line 2 is properly connected between the unit and the PBX.
	Remove all the messages from the mailbox and then send a new message.
	Check unit's DTMF level and length.
	Add a pause between codes.
	For Rings or Sign Rings Notification, the first notification can take up to the amount of time defined by Ring Notification Interval.
	Make sure that for Rings and Sign Rings Notifications the maximum number of retries has not been reached.
Symptom:	External notification does not work.
Solution:	Make sure you have selected the correct External Access code.
	Make sure you did not add the External Access code to the telephone number because the unit automatically dials the External Access code.
	Make sure External Notification is allowed and enabled.
	The first notification can take up to the amount of time that is defined by Ring Notification Interval.
	Make sure start and stop times are properly defined and maximum number of retries has not been reached.
Symptom:	The unit does not transfer calls. DTMF tones are heard or the call is disconnected.
Solution:	Flash 1 has been incorrectly configured.
Symptom:	When I dial command code *300, the unit plays an error message.
Solution:	You are trying to change the number of digits in an extension after extensions and mailboxes have been configured. To change the number of digits in an extension, you must first remove all mailboxes and extensions.

Symptom:	Command *510 does not allow a mailbox to be deleted.
Solution:	The mailbox is used in script menus. Please remove the mailbox from all the scripts and then use the delete command.
Symptom:	In supervised mode, the unit incorrectly returns calls.
Solution:	The unit's time to wait for No-Answer parameter value is greater then the PBX's recall time parameter value. Decrease the value of the unit's Time to Wait for No-Answer parameter or increase the value of the PBX's recall time parameters.
Symptom:	In supervised mode, the unit does not recognize answered calls.
Solution:	Increase the voice Sensitivity parameter value. Make sure that the correct Transfer Supervision Type has been selected.
Symptom:	The unit transfers calls made to an extension to its mailbox and plays message stating that the extension is unavailable.
Solution:	The extension is in Do Not Disturb mode.
Symptom:	The Voice Mail Utility Program (VMS) issues a warning that the COM port is unavailable.
Solution:	Make sure that the selected COM port is not being used by another device or Program. If the selected COM port was previously used by another device, remove the device, shut down and restart your computer to release the serial port.
Symptom:	A message is sent to a mailbox group that contains five defined mailboxes but only two receive the message.
Solution:	The messages were sent to all the mailboxes in the group but only accepted by those mailboxes that did not have the maximum number of messages recorded.
Symptom:	The unit has been programmed to operate in Night mode. When a call is received, it disconnects the call and switches to Day mode.
Solution:	Make sure that the night greeting script is recorded.
Symptom:	What happens when a mailbox and mailbox group have the same extension number?
Solution:	Messages are sent to the mailbox. In general, mailboxes have higher priority than mailbox groups.
Symptom:	DTMFs dialed by the unit are not recognized by the PBX.
Solution:	Change the amplitude and the ON and OFF levels of DTMFs dialed by unit (*379,*371).
Symptom:	How can the password of the mailbox be reset to its default 1234.
Solution:	Use command *570 or press The Reset button in the VMS.
Symptom:	How can I find out how much memory is supported by my Voice Mail.
Solution:	Use statistics option in VMS.

Symptom:	Pager Notification does not work.
Solution:	Make sure you have selected the correct External Access Code.
	Make sure you did not add the External Access Code to the pager number.
	Make sure pager notification is allowed and enabled.
	Make sure the pager number is entered correctly.
	Make sure your pager company provides a 1400 Hz tone if '$' is used.
	If your provider does not support 1400 Hz tone SIT tone, use enough pauses to by-pass the sent tone.
	The first notification can take up to the amount of time that is defined by Ring Notification Interval.
	Make sure start and stop times are properly defined and maximum number of retries has not been reached.
Symptom:	When I reach a mailbox, a menu is played immediately and I am not given a chance to leave a message.
Solution:	The mailbox is defined as an announcer mailbox.
Symptom:	I have disabled the Automatic Gain Control but the messages are played louder then needed.
Solution:	Only messages recorded after the change are affected.
	Initiate a new call after changing the AGCs status.
Symptom:	How can I delete the messages of all users.
Solution:	Change the parameters "Maximum no. of days to store messages" to 1 (*740) and reorganize the system (*610).
Symptom:	VMSs transfer operation is interrupted when large files are used with windows 98 or NT.
Solution:	Windows 98 and NT support a power save mode, which interferes with serial ports operation. Disable this feature on PCs that run the VMS application.

Chapter 10: Programming Commands

10.1. General

Table 10-1 presents a summary of DTMF programming commands.

Table 10-1: DTMF Programming Commands

Operator Commands	
Operation	**Command**
Day light summer time	***7 + XXXX + Y** XXXX = operator's password Y = 0; Reduce the time by one hour Y = 1; Increase the time by one hour
Change the operational mode (without entering the programming mode)	***8 + XXXX + Y** XXXX = operator's password Y = 0; Day Y = 1; Night Y = 2; Holiday Y = 3; Auto Y = 4; Break

- The following programming codes are to be used after dialing *900 + administrator password.

Script Programming Commands	
Operation	**Command**
Directory listing format	***011 + X** X = 0; Last name X = 1; First name
Record a script message	***100 + XX + Beep + Record + #**
Play a script message	***101 + XX + Beep + Playback**
Delete a script message	***102 + XX** XX = Script No.
Select EOM timeout for each script	***105 + XX + Y + #** XX = Script No. Y = Timeout in seconds
Transfer to a script message	***110 + XX + B + YY + #**

Script Programming Commands	
Operation	**Command**
Transfer to the directory listing	***111 + XX + B + #** XX = Script number
Select opening menu	***112 + XX + YY + Z + #** XX = Default script number 00,10,15 or 20 YY = Replacement script number 00-20 Z = Line number 1-4
Transfer to opening menu	***115 + XX + B + #**
Transfer to a script message with a change of language	***117 + XX + B + YY + Z + #** Z = 1, 2 or 3 (language number)
Transfer to a script message with a change of language	***117 + XX + B + YY + Z + #** Z = 1, 2 or 3 (language number)
Set default language	***118 + Z** Z = 1, 2 or 3 (language number)
Transfer to an extension	***120 + XX + B + Extension + #**
Dials a programmed DTMF string from the auto-attendant script	***121 + XX + B + YY + #** YY = DTMF string number (00-19) *See also command *381*
Transfer to an operator	***125 + XX + #**
Transfer to a mailbox	***130 + XX + B + Mailbox + #**
Transfer to a script message with a change of language	***117 + XX + B + YY + Z + #** Z = 1, 2 or 3 (language number)
Set default language	***118 + Z** Z = 1, 2 or 3 (language number)
Transfer to an extension	***120 + XX + B + Extension + #**
Dials a programmed DTMF string from the auto-attendant script	***121 + XX + B + YY + #** YY = DTMF string number (00-19) *See also command *381*
Transfer to an operator	***125 + XX + #**
Transfer to a mailbox	***130 + XX + B + Mailbox + #**
Disconnect	*140 + XX + B + Z + # Z = 0; no message Z = 1; with message

Script Programming Commands	
Operation	**Command**
Leave a message to a mailbox	*150 + XX + B + # XX = script No.
Retrieve messages from a mailbox	*160 + XX + B + #
Direct transfer to an extension	*170 + XX + first digit(s) + #
Direct transfer to a mailbox	*175 + XX + first digit(s) + #
Place a call on Hold	*180 + XX + B + #
Blind Transfer to Busy Extension	*185 + XX + B + #
Reset a specific message entry to its default value	*190 + XX + B + #
Reset all message entries to defaults	*190 + XX + #
Disconnect	*140 + XX + B + Z + # Z = 0; no message Z = 1; with message

In-Band DTMF Programming Commands	
Operation	**Command**
Define an In-Band DTMF code for an event	***200 + XX + YY…YY +** # XX = Event number – 00-39 YY…YY = In-Band DTMF code
Delete all In-Band DTMF codes	*200 + #
Delete In-Band DTMF codes for an event	*200 + XX + # X = Event number – 00-39

In-Band DTMF Programming Commands	
Operation	**Command**
Select a task for an In-Band DTMF code	*201 + XX + YY XX = Event number YY = Task number: 00 = Auto Attendant opening script 01 = Leave a message 02 = Retrieve messages 03 = Play a specific script* 04 = Play a busy menu 05 = Play a No Answer menu 06 = Play a DND menu 07 = Disconnect the call 08 = Record the conversation 09 = Play a specific script and change to 1st language* 10 = Play a specific script and change to 2nd language* 11 = Play a specific script and change to 3rd language*
Select a task for an In-Band DTMF code	12 = Play the Directory Listing (DBN) 13 = Transfer to a mailbox* 14 = Transfer to an extension* 15 = Transfer to the operator * = A destination must be defined for these tasks
Select a destination for an In-Band DTMF event	***202 + XX + YYYY + #** XX = Event No. YYYY = Destination
Delete the destination for a specific In-Band DTMF event	***202 + XX + #** XX = Event No.
Delete all destinations	***202 + #**
MATRA PBX Support	*204 + X, where X=0 support disabled X=1 support enabled
Define the time to wait for the first DTMF character in the In-Band DTMF code.	***210 + XXXX** XXXX = 0000-9980 in steps of 20 ms
Define the time to wait between receipt of each DTMF character in the In-Band DTMF code	***211 + XXX** XXX = 000-980 in steps of 20 ms

In-Band DTMF Programming Commands	
Operation	**Command**
Define Transfer Supervision Type	***220 + X** X = 0; Use Call Progress Tones X = 1, Use DTMF codes
Define the DTMF code for the Answer, Busy and DND conditions	***221 + X + Code[1] + #** X = 1; Answer condition X = 2; Busy condition X = 3; Do Not Disturb condition Code[1] = DTMF code sent by the PBX for the Transfer Supervision operation
Delete the DTMF code for a specific condition	***221 + X + #** X = 1; Answer condition X = 2; Busy condition X = 3; Do Not Disturb condition
Delete the DTMF code for all conditions	***221 + #**

PBX Parameters	
Operation	**Command**
No. of digits in extension	***300 + X**
Cut off time for continuous call progress tone detection	***301 + X** X = cut off time in seconds (0-9) Default: 6 sec.
No. of rings before the line is answered	***310 + line number + number of rings**
Time to wait for No Answer	***311 + XX**
PBX legal extensions	***320 + Y + First Ext. + Last Ext. + #** Y = group number (0-9)
Delete all PBX legal extensions	***320 + #**
Operator ID code	***330 + X** X = 0-9
Key To retrieve messages during mailbox greeting play back	***331 + X** X = 0-9; Retrieve digit
Disconnect code	***333 + Code[1] + #**
Delete disconnect code	***333 + #**

PBX Parameters	
Operation	**Command**
External access code	***340 + X + #** X = up to 4 digits external line access code.Legal entries:digits 0-9,ABCD, , Pause-*1
Clear external access code	***340 + #**
Pause before and after external access code	***341 + X** X = pause length in seconds (0-9) Default: 2 sec.
Transfer mode for all extensions	***350 + X + Y** X = 1; All extensions except the operator X = 2; Operator extension only Y = 0; Non Supervised Y = 1; Supervised Mode Y = 2; Semi Supervised mode
Day operator, Night operator, Fax and Supervisor's extensions	***360 + X + YYYY + #** X = 1; Day operator X = 2; Night operator X = 3; Fax extension X = 4; Supervisor extension YYYY = Corresponding extension number.
Delete a specific extension assignment	***360 + X + #** X = 1; Day operator X = 2; Night operator X = 3; Fax extension X = 4; Supervisor extension
Volume level	***369 + X** X = volume level (0-9), 9 = Loudest Default: 5
Flash 1	***370 + XXX**

PBX Parameters	
Operation	**Command**
Cadence of system input and output tones in milliseconds	***371 + X + YYYY** X = 0; incoming minimum DTMF length X = 1; busy off X = 2; busy on X = 3; Disconnect off X = 4; Disconnect on X = *; DTMF off X = #; DTMF on YYYY = Cadence in milliseconds in steps of 20 milliseconds
Length of DTMF cadence, sent by the PBX, e.g. a Disconnect code. Note: This parameter is needed in order to calculate the time, which must be truncated from the end of the message, which is terminated via the Disconnect code.	***372 + X** X = The length of DTMF cadence in ms (0-9) Default: 1 Note: Each step represents 100 ms. So by setting this parameter to 2, the Voice Mail will cut 200 ms from the end of the recording.
Busy signal cadence check	***375 + XXXX + #**
Voice and DTMF sensitivity	***376 + X + Y** X = 1; Voice sensitivity level X = 2; DTMF sensitivity level Y = Level (0-9), 9 = Most sensitive Default: 5 Note: To activate the new selection, a new call must be initiated
Automatic Gain Control (AGC)	***377 + X** X = 0; AGC disabled X = 1; AGC enabled (Default) **Note:** To activate the new selection, a new call must be initiated
DTMF amplitude	***379 + X** X = volume level (3-9), 9 = Loudest Default: 5

PBX Parameters	
Operation	**Command**
Procedural codes sent to the PBX in order to perform a specific task	***380 + X + Code #** X = 1; LED1 notification code X = 2; LED2 notification code X = 3; LED off code X = 4; Transfer code X = 5; Recall from Busy X = 6; Recall from No Answer Code = Respective PBX code[1]
Delete a specific procedural code	***380 + X + #** X = 1; LED1 notification code X = 2; LED2 notification code X = 3; LED off code X = 4; Transfer code X = 5; Recall from Busy X = 6; Recall from No Answer
Dial a String from the Auto Attendant to the PBX	***381 + XX + YY…YY + #** XX = String number (0-19) YY…YY = DTMF string
Answer number of samples	***386 + X** X = number of samples (0-9) Default: 5

Setting Time and Date	
Operation	**Command**
Change the operational mode	***400 + X** X = 0; Day X = 3; Auto X = 1; Night X = 4; Break X = 2; Holiday
Select time stamp format	***410 + X**
Set time and day	***420 + Hour + Minutes**
Set date	***430 + Date + Month + Year**
Listen to the system time	***440**
Set working hours	***450 + Day + Starting time + Ending time**

Setting Time and Date	
Operation	**Command**
Set break time	***460 + X + Y + hh mm + hh mm + SS, where** **X - Day of the week 1-7, 1 for Monday** **Y – Break number 0-9** **SS – Script number** **Hh mm – start and stop of break time in 24 format.**
Entering annual holidays dates	***470 + DD + MM + hh:mm + hh:mm** DD = Day of the month MM = month hh:mm = Start time; Hour and minutes in 24 hour format hh:mm = End time; Hour and minutes in 24 hour format
Delete all holidays	***470 + #**
Delete all holidays on a specific date	***470 + DD + MM #** DD = Day of the month MM = month
Delete all holidays for a specific month	**470 + ** + MM + #** MM = month
External notification active time	***490 + hh:mm + hh:mm** hh:mm = Start time; Hour and minutes in 24 hour format hh:mm = End time; Hour and minutes in 24 hour format

Mailbox Configuration Commands	
Operation	**Command**
Create a range of mailboxes	***500 + First mailbox + Last mailbox + #**
Create a mailbox	***501 + Mailbox + #**
Change to announcer mailbox	***502 + XXXX + Y + #** XXXX = Existing mailbox number Y = 0; Regular mailbox Y = 1; Announcer mailbox

Mailbox Configuration Commands	
Operation	**Command**
Create a range of mailboxes	***500 + First mailbox + Last mailbox + #**
Create a mailbox	***501 + Mailbox + #**
Change to announcer mailbox	***502 + XXXX + Y + #** XXXX = Existing mailbox number Y = 0; Regular mailbox Y = 1; Announcer mailbox
Delete a mailbox	***510 + Mailbox number + #**
Create a range of virtual mailboxes	***520 + First mailbox + Last mailbox + #**
Create a virtual mailbox	***521 + Mailbox number + #**
Play or skip time and date stamp for a range of mailboxes	***530 + First mailbox + Last mailbox + B + #** B = 0; Play the time and date B = 1; Skip the time and date
Play or skip time and date stamp for a mailbox	***531 + Mailbox number + B + #** B = 0; Play the time and date B = 1; Skip the time and date
Define a language for a range of mailboxes	***532 + First Mailbox + Last Mailbox + Z + #** where Z = 1, 2 or 3 (language number)
Define a language for a mailbox	***533 + Mailbox Number + Z + #** where Z = 1, 2 or 3 (language number)
Add a mailbox to a group	***540 + Group number + Mailbox number + #**
Change the first digit of the group numbers	***545 + First Digit of the Group Numbers**
Delete a mailbox from a group	***550 + Group number + Mailbox number + #**
Reset a user password	***570 + Mailbox number + #**

System Functionality Commands	
Operation	**Command**
Change the system administrator's password	***600 + * + Old password + * + New password + #** ***Warning:*** *Do not use the * or # keys.*
Change the operator's password	***601 + * + Old password + New password + #** ***Warning:*** *Do not use the * or # keys.*
Forced reorganization	***610**
Resetting the system to default	***654 + * + XXXX + #** XXXX is the system administrator password
Listen to the software version number	***680**
Play a system message	***690 + Z + XXX** Z = 1, 2 or 3 (language number) XXX = system message number
Play all system messages	***691 + Z** Z= 1, 2 or 3 (language number)
System message setting	***699 + X + Y** X = 1; System message 004 X = 2; System message 102 X = 3; System message 095 Y = 0; Play Y = 1; Don't play Y = 2; (Only when X = 3) Play the message to mailboxes without a greeting message.
Change the system administrator's password	***600 + * + Old password + * + New password + #** ***Warning:*** *Do not use the * or # keys.*
Change the operator's password	***601 + * + Old password + New password + #** ***Warning:*** *Do not use the * or # keys.*
Forced reorganization	***610**
Resetting the system to default	***654 + * + XXXX + #** XXXX is the system administrator password
Listen to the software version number	***680**
Play a system message	***690 + Z + XXX** Z = 1, 2 or 3 (language number) XXX = system message number

Mailbox Notification Commands	
Operation	**Command**
Set local notification for a range of mailboxes	***700 + First mailbox + Last mailbox + X + #** X = 0; disabled X = 1; LED 1 X = 2; LED 2 X = 3; Ring Signs X = 4; Rings
Disable local notification for all mailboxes	***700 + #**
Set local notification for one mailbox	***701 + Mailbox + X + #** X = 0; disabled X = 1; LED 1 X = 2; LED 2 X = 3; Ring Signs X = 4; Rings
Permit remote notification for a range of mailboxes	***710 + First mailbox + Last mailbox + X + #** X = 0; not permitted X = 1; permitted
Disable remote notification for all mailboxes	***710 + #**
Permit remote notification for one mailbox	***711 + Mailbox + X + #** X = 0; not permitted X = 1; permitted
Ring Notification Interval	***720 + XX** XX is in minutes (1-99)
Ring Notification Duration	***730 + X** X = 0; short ring X = 1; long ring
Maximum no. of days to store a message in the system	***740 + XX** XX = Number of days 00-99.
Time to wait after off-hook for notification dialing	***741 + X** X = Time in seconds (0-9)
Ring notification Retries	***750 + XX**
Activate the LED notification	***760 + X** X = 0; for 1st new message X = 1; for every new message
Adjusting recording length	***790 + X** X = 1-9 minutes

[1] Refers to PBX codes. Each code contains digits 0-9, *, #, Flash-1, Flash-2, Pause and Extension Number.

When entering a code, dial:

*0 for extension
*1 for pause
*2 for Flash-1
*3 for Flash-2
*4 for #
*5 for A
*6 for B
*7 for C
*8 for D
*9 for the number of new messages in the mailbox
** for *

Chapter 11: Programming Forms

11.1. General

The following pages include forms to help you properly setup and maintain the Voice Mail using DTMF programming commands.

Operation	Command
Select opening menu	*112 ___ ___ __ # ___ ___ __ # ___ ___ __ # ___ ___ __ #
No. of digits in an extension	*300 _____
No. of rings before the line is answered	Line 1: *310 1 _____ Line 2: *310 2 _____ Line 3: *310 3 _____ Line 4: *310 4 _____
Time to wait for No Answer	*311 _____
Legal PBX extensions	Group 1: *320 0 ___ ___ # Group 2: *320 1 ___ ___ # Group 3: *320 2 ___ ___ # Group 4: *320 3 ___ ___ # Group 5: *320 4 ___ ___ #
Operator ID Code	*330 _____
Disconnect Code	*333 _____ #
External Access Code	*340 _____#
Transfer mode	*350 ___ _____ ___ _____
Day Operator's Extension No. Night Operator's Extension No. Fax Extension No. Supervisor Extension No.	*360 ___ _____ # ___ _____# ___ _____# ___ _____#
Flash 1	*370 _____
Cadence of System Input and Output Tones in Milliseconds	*371 ___ _____ ___ _____ ___ _____ ___ _____
Voice Sensitivity	*376 1 _____

Operation	Command
Procedural Codes Sent to the PBX in Order to Perform Specific Tasks	*380 ___ _____ #
Create a range of mailboxes Create a mailbox	*500 _____ _____ # *501 _____ #
Create a range of virtual mailboxes Create a virtual mailbox	*520 _____ _____ # *521 _____ #
Change the first digit of the group numbers	*545 __
Add mailboxes to a group	Group 000: *540 000 _____ # Group 001: *540 001 _____ # Group 002: *540 002 _____ # Group 003: *540 003 _____ #
Maximum no. of days to store a message in the system	*740 _____

Setting Notification For Mailboxes

Local notification for a range of mailboxes:	*700 _____ _____ ___ #
Local notification for one mailbox:	*701 _____ ___ #
Permitting remote notification for a range of mailboxes:	*710 _____ _____ ___ #
Permitting remote notification for one mailbox:	*711 _____ ___ #
External notification active time	*490 ___ ___ ___ ___

Notification Parameters

Ring notification interval	*720 _____
Ring notification duration	*730 _____
Activate the LED notification	*760 _____

System Time and Date

See Section 4.3.2 for information on setting the system time and date using codes *420 and *430.

Setting the Holiday Schedule

See Section 6.5.2.1 for information on setting the holidays using code *470

Day	Month	Start	End	Name of holiday
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Setting the Working Time

See Section 4.3.3 for information on setting the following schedule using codes *450 and *460.

	Working Hours		Break Time	
Day	Start	End	Start	End
1 (Monday)	_____	_____	_____	_____
2 (Tuesday)	_____	_____	_____	_____
3 (Wednesday)	_____	_____	_____	_____
4 (Thursday)	_____	_____	_____	_____
5 (Friday)	_____	_____	_____	_____
6 (Saturday)	_____	_____	_____	_____
7 (Sunday)	_____	_____	_____	_____

Setting the Operational Mode

Operational Mode: *400 ___ Select: Day (0)/Night (1)/Holiday (2)/Auto (3)/Break(4)

This form contains the programming schedule for up to four script messages. Please copy the form if you have more than four script messages.

The following numbers are dedicated to specific script messages by default:

- Script message number 00 to the Day Mode Opening Menu
- Script message number 10 to the Night Mode Opening Menu
- Script message number 15 to the Break Time Opening Menu
- Script message number 20 to the Holiday Mode Opening Menu

The rest of the script messages (01-09, 11-14 and 16-19) may be used in all modes without limitations.

Script No. _____

0 _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
EOM _____

Script No. _____

0 _____
1 _____
2 _____
3 _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
EOM _____

Programming the In-Band DTMF Protocol

Event	In-Band DTMF Code	Task/Action	Destination
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			

Command Codes Used to Program the In-Band DTMF Protocol

OPERATION	COMMAND
Define an In-Band DTMF code for an event	*200 __ _____ #
Select a task for an In-Band DTMF code	*201 __ __
Select a destination for a specific in band DTMF event	*202 __ ____#
Define the time to wait for the first DTMF character in the In-Band DTMF code	*210 _____
Define the time to wait between receipt of each DTMF character in the In-Band DTMF code	*211 _____
Define Transfer Supervision Type	*220 __
Define the DTMF code for the Answer, Busy and Do Not Disturb conditions	*221 __ ____ #

Chapter 12: System Messages

12.1. General

This chapter lists the Voice Mail system messages and their numbers. You can hear each of these messages in the programming mode by dialing:

*690 + language digit (1, 2 or 3) + system message number

- or -

To hear all system messages dial:

*691 + language digit

12.2. System Messages

No.	System Message
000	This system has not been programmed. Please refer to the installation manual for instructions. Thank you!
001	Please hang up now.
002	Please enter your password.
003	Invalid entry. Please try again.
004	Please hold.
005	Message was received on…
006	At...
007	Zero
008	O’clock
009	No…

12.3. Numbers

010	One	024	Fifteen
011	Two	025	Sixteen
012	Three	026	Seventeen
013	Four	027	Eighteen
014	Five	028	Nineteen
015	Six	029	Twenty
016	Seven	030	Thirty
017	Eight	031	Forty
018	Nine	032	Fifty
019	Ten	033	Sixty
020	Eleven	034	Seventy
021	Twelve	035	Eighty
022	Thirteen	036	Ninety
023	Fourteen		

12.4. Dates

037	First	048	Twelfth
038	Second	049	Thirteenth
039	Third	050	Fourteenth
040	Fourth	051	Fifteenth
041	Fifth	052	Sixteenth
042	Sixth	053	Seventeenth
043	Seventh	054	Eighteenth
044	Eighth	055	Nineteenth
045	Ninth	056	Twentieth
046	Tenth	057	Thirtieth
047	Eleventh		

12.5. Months

058	Of January	064	Of July
059	Of February	065	Of August
060	Of March	066	Of September
061	Of April	067	Of October
062	Of May	068	Of November
063	Of June	069	Of December

12.6. General Messages

No.	System Message
070	…and…
071	You have…
072	…new messages
073	…new message
074	…messages
075	To retrieve messages, press 1. To change mailbox settings, press 2. To send a message, press 8. To return to the main menu, press 9.
076	You have no messages.
077	Message saved. Please hold.
078	To skip this message, press 1. To replay, press 2. To save, press 3. To forward, press 4. To reply to message sender, press 5. To delete, press 8. To return to the previous menu, press 9.
079	Message saved.
080	Message deleted.
081	Please enter a new four digit password.
082	To delete skipped messages, press 8. To save all messages, press 9.
083	…yesterday…
084	…today…
085	Please enter your mailbox number.
086	Invalid mailbox. Please try again.
087	Incorrect password. Please try again.
088	Please record your greeting after the tone. Press the hash key when you have finished.
089	Please record your name after the tone. Press the hash key when you have finished.
090	Calls will be transferred to your extension.
091	Calls will not be transferred to your extension.
092	Please enter the mailbox number.
093	You have reached the mailbox of…
094	You have reached mailbox number…
095	Please leave a message after the tone. When you are finished press star for further options or simply hang up.

No.	System Message
096	The required extension is busy. To try another extension, press 1 followed by the extension number. To hold, press 2. To leave a message, press 8. To transfer to the operator, press 0. To return to the Main Menu, press 9.
097	The required extension does not answer. To try another extension, press 1 followed by the extension number. To leave a message, press 8. To transfer to the operator, press 0. To return to the main menu, press 9.
098	The mailbox is currently unavailable.
099	The system is busy. Please wait.
100	a.m.
101	p.m.
102	You have a call.
103	The required extension is busy. To try another extension, press 1 followed by the extension number. To hold, press 2. To transfer to the operator, press 0. To return to the main menu, press 9.
104	The required extension does not answer. To try another extension, press 1 followed by the extension number. To transfer to the operator, press 0. To return to the main menu, press 9.
105	You have exceeded the maximum message length. Your message will be sent.
106	Sunday
107	Monday
108	Tuesday
109	Wednesday
110	Thursday
111	Friday
112	Saturday
113	O (As Eight-O-Two for 8:02)
114	Pause
115	Please record your message after the tone. Press the hash key when you have finished.
116	To change external notification, press 1. To enter the telephone number, press 2. To listen to the current telephone number, press 3. To return to the previous menu, press 9.
117	External notification is disabled.
118	External notification is enabled.
119	You have a new message. To retrieve messages press 1.
120	Please enter the telephone number. Press the hash key when you have finished.

No.	System Message
121	The required extension is unavailable. To try another extension, press 1 followed by the extension number. To leave a message, press 8. To transfer to the operator, press 0. To return to the main menu, press 9.
122	Invalid extension number. Please try again.
123	Skipped messages have been deleted.
124	To listen to your recording, press 1. To rerecord, press 2. To delete, press 8. To return to the previous menu, press 9.
125	That recording does not exist.
126	The Busy On-Time is…
127	The Busy Off-Time is…
128	To listen to your password, press 1. To edit, press 2. To return to the previous menu, dial 9.
129	Message was received…
130	For Pager notification, press 1. To enter the pager number, press 2. To listen to the pager number, press 3. To return to the previous menu, press 9.
131	Pager notification is disabled.
132	Pager notification is enabled.
133	Please enter your pager number. Press the hash key when you have finished.
134	…saved messages.
135	…saved message.
136	That mailbox is currently unavailable.
137	Storage space is nearing capacity.
138	For…
139	…press…
140	To return to the previous list, press 7.
141	For additional listings, press 8.
142	To enter another name, press 0. To return to the main menu, press 9.
143	No directory listing is available.
144	To record your greeting, press 1. To record your name, press 2. To access directory listing options, press 3. To change your password, press 4. To change the Do Not Disturb mode, press 5. To change external notification, press 6. To change pager notification, press 7. To return to the previous menu, press 9.
145	To listen to your directory listing, press 1. To enter your directory listing, press 2. To delete your directory listing, press 8. To return to the previous menu, press 9.
146	Operation successful.
147	Using your keypad, please enter the first 3 letters of your last name. For Q press 7 for Z press 9.

No.	System Message
148	Using your keypad, please enter the first 3 letters of the person's last name. For Q press 7 for Z press 9.
149	Using your keypad, please enter the first 3 letters of your first name. For Q press 7 for Z press 9.
150	Using your keypad, please enter the first 3 letters of the person's first name. For Q press 7 for Z press 9.
151	Your call is being transferred to…
152	To join the directory listing, please make sure your name is recorded.
153	Product version is…
154	To try another extension, press '1' followed by the extension number. To transfer to the operator, press '0'. To return to the Main Menu, press '9'.
155	This value has not been set.
156	To change mailbox settings, press 2. To send a message, press 8. To return to the main menu, press 9.
157	To skip this message, press 1. To replay, press 2. To save, press 3. To forward, press 4. To delete, press 8. To return to the previous menu, press 9.
158	To record your greeting, press 1. To record your name, press 2. To access directory-listing options, press 3. To change your password, press 4. To change the Do Not Disturb mode, press 5. To return to the previous menu, press 9.

Appendix 1: Pre-installation

PLEASE ENSURE YOU FOLLOW THESE INSTRUCTIONS PRIOR TO INSTALLATION.

ALL VOICEMAIL PROGRAMMING ON THE PBX MUST BE COMPLETED BEFORE CONTINUING.

1. Power up the VoxBox
2. Attach Analogue phone cable to the phone system and the box
3. Ring box and await answer
4. On answer dial ***900, 1234, *654, *, 1234 #** (to initialise box)
5. If the unit is not answering you will need to use the initialization command through the VMS software. (Turn to page 6.13)

NB.

You will need the Initialisation file. This can be downloaded from www.oak.co.uk

ONLY THEN SHOULD YOU ATTACH THE PROGRAMMING CABLE AND START PROGRAMMING WITH THE VMS SOFTWARE PROVIDED.

Appendix 2: Installation

INSTALLATION PROCEDURES FOR VOXBOX

1. Connect VoxBox to voicemail ports (page 3-1).
2. Load the relevant PBX VMS file and check PBX Parameters (see page 6-4 and page 6-13 of User Guide) to ensure correct integration between the VoxBox and the PBX.
3. Set the VoxBox's real time clock (see page 4-8).
4. Set the system schedule (see page 6-27).
5. Create mailboxes (see page 6-33).
6. Define a notification type for each mailbox (see page 6-35).
7. Define notification parameters (i.e. message light on and message light off and interval between ring notification on page 6-37).
8. Record (see page 4-16) and program (see page 6-21) script menus for the Automated Attendant. Make sure you define the mailboxes before building Automated Attendant script menus.
9. Send parameters to the VoxBox.
10. Dial voicemail number and test system is answering.
11. Test internal and external diverts to mailboxes.
12. Test message notification.
13. Test system clears down correctly during mailbox greetings.
14. Test all types of transfers.
15. Test message retrieval.
16. Check time stamps of messages.

Once you are satisfied that the VoxBox installation is complete backup the .VUP settings to file.

Appendix 3:FAQ

Question: When I dial the VoxBox, I hear the message "This Voicemail system has not been programmed" What do I have to do to rectify this?

Answer: The VoxBox is simply stating that you have yet to program the automated attendant script menu. Refer to step 8 of the Installation.

Question: When I try to transfer to a mailbox to leave / retrieve a message, the message "Invalid Mailbox, please try again" is played. I have created this mailbox, so why is it playing this message?

Answer: You need to check the range of legal extensions under PBX Parameters defined in the VMS. Firstly, make sure that you have a range set, and secondly ensure the mailbox is included in this range.

Question: "This mailbox is unavailable" plays when I am trying to leave a message in a mailbox. I have previously been able to access this mailbox, so why can't I get into it now?

Answer: There is a limit to the amount of messages any mailbox can hold. Check with your supplier which version you have and what the message limit is.

Question: Every time I call the VoxBox it plays the main script (00). I want the VoxBox to treat different types of calls differently. How do I set up the VoxBox to do this?

Answer: You need to check the programming of the In-Band DTMF Protocols. We highly recommend the use of Digit Analyzers, which you can use to match digits received from the phone system with the Codes set-up in the VMS.

Appendix 4: Testing

IF YOU ARE EXPERIENCING PROBLEMS PLEASE FOLLOW THE FOLLOWING TESTING PROCEDURES.

1. Connect VoxBox to power supply, does the normal LED light sequence occur finishing with either the Day, Night, Holiday or Auto light remaining on?

   If no, then re-initialize the box.

2. Connect VoxBox to analogue port/line, dial VoxBox, does it answer and play script00?

   If no, then re-initialize the box.

3. Connect serial link and read from box, set-up 2 options on script00 to leave a message and retrieve messages send to box.

4. Dial VoxBox and leave a message in an existing mailbox, return to the main script and retrieve that message successful?

   If no, then re-initialize the box.

5. Box successfully tested.

   If a problem is experienced at any stage, re-initialize the box.

6. If the problem still persists, please contact our dedicated Customer Service Centre on 0870 2020 24 7 for further assistance.

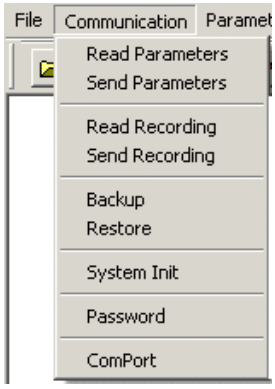
Appendix 5: Initialisation

VOXBOX INITIALISATION THROUGH VMS

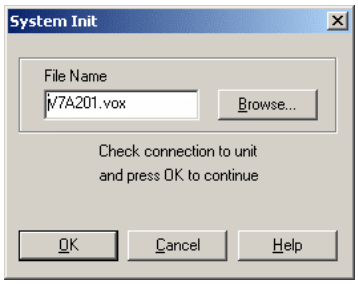
The System Init command, available in the VUP software, will reset the VoxBox's configuration back to its factory default settings.

The actual process is very straightforward and should take approximately 30 minutes.

*Please note that resetting the VoxBox in this way, **will delete all** saved information such as messages, greetings and Script recordings. It is possible to backup the whole system data (Script-recordings, names, greetings, messages, system prompts) by using the Backup and Restore command also available in the VMS software.*



1. Select '**System Init**' from the '**Communication**' menu.



2. When the 'System Init' window opens, click the 'Browse' button

3. Select an initialisation file (filename: "name.vox") i.e. 'V4a109.vox' for a version 4.07 VoxBox available from www.oak.co.uk

4. Click the 'OK' button, then confirm. The process will now begin writing blocks to the VoxBox.

5. After approximately 20 minutes, this process will finish and you will be prompted to reset the box (power on then power off).

6. After resetting the VoxBox, it is now ready for programming.

You can send a saved .VUP file to the box or use the Restore command from a .wax file.

Appendix 6: VoxBox Returns

RETURNS FORM FOR VOXBOX

VOXBOX RETURNS
OAK TELECOM LTD
7 ALBANY PARK
CABOT LANE
POOLE
DORSET BH17 7BX

Forename:	Surname:	
Company name:		
Address:		
City:	Postcode:	Country:
Telephone:		
Name of Installer:		
Telephone Nº. of Installer:		
Telephone system:		
VoxBox type:	Version:	Serial No.:
PLEASE CIRCLE WHAT IS BEING RETURNED:		
POWER SUPPLY	**LEADS**	**VUP/VUJ DISC**
SIDE PANEL COVER	**MANUAL**	**SCREWS**
Reason for return *(in order to reduce any delays, please be specific)*:		
Date returned:	Date received by Oak:	

Please print two copies of this form, sending one with the unit and keeping the second as a record.

Appendix 7: Contacting Us

If you require any further information on VoiceMail products from Oak Telecom Ltd., or need to order any expansion components for your VoxBox, please contact us at: -

Oak Telecom Ltd
7, Albany Park
Cabot Lane
Poole
Dorset BH17 7BX

Tel:	0870 2000 24 7
Fax:	0870 2000 24 8
Technical Support:	0870 2020 24 7
E-mail:	support@oak.co.uk
Website:	www.oak.co.uk

If you require any Technical Support for the VoxBox, please visit our website at '**http://www.oak.co.uk/**', call our Customer Service Department on **0870 2020 24 7**, or e-mail '**support@oak.co.uk**'.